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Editorial

This year's second issue of *Greek and Roman Musical Studies* collects some of the papers presented during the 10th Moisa conference, admirably organized by Tosca Lynch and Armand D'Angour in July 2017 at Jesus College in Oxford. The symposium was devoted to an important musical and cultural phenomenon that not only profoundly shaped the Classical age on a variety of fronts, but also created a long-lasting and influential echo in subsequent periods: the so-called 'revolution' of the New Music.

This powerful (and controversial) change in musical language and style affected many contexts and genres in antiquity, as we see from the wide range of issues covered by the papers here published (which, however, cover only some of the numerous topics discussed during the conference). First is the theatrical repertoire, investigated from different perspectives in the first three contributions: Barbara Castiglioni analyzes the imagery of Dionysiac performance in the late Euripidean poetry, full of allusions to contemporary musical innovations meant to reinforce the tragedian's interest in the irrational; Laura Gianvittorio and Tosca Lynch focus instead on comedy, the former convincingly arguing that the criticism against musical innovations was, sometimes, expressed through comically revisited erotic dance performed by prostitute-like dancers on the comic stage, the latter giving a new thought-provoking interpretation of the famous fragment of Pherecrates' *Chiron*, which may provide clues about the technical feasibility of modulations on stringed instruments. The following papers further concentrate on musical technicalities, which were the main hallmark of this cultural phenomenon: Egert Pöhlmann focuses on the mimetic style of the Delphic Paeans, reconnecting these late musical documents to the experimental innovations of the New Music, while Stelios Psaroudakēs and Fotis Moschos investigate the rhythmic 'irrationality' described by the ancient musical theorists, assessing—with the aid of computer experiments—the point where the human ear can perceive it and evaluating when two different rhythmical patterns intersect. Finally, Andreas Kramarz broadens the reflection on this important turning point in ancient musical culture exploring the echoes of the 'ancient' vs. 'new music' debate in some Christian authors, especially Clement of Alexandria.

As always, I thank all my colleagues on the Editorial Board and the enormously helpful staff of the publisher: they all make my task easier and extremely enjoyable.

Eleonora Rocconi



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Music, Ritual, and Self-Referentiality in the Second Stasimon of Euripides' *Helen*

The Dionysian Necessity

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Abstract

The imagery of Dionysiac performance is characteristic of Euripides' later choral odes and returns particularly in the *Helen's* second stasimon, which foregrounds its own connections with the mimetic program of the New Music and its emphasis on the emancipation of feelings. This paper aims to show that Euripides' deep interest in contemporary musical innovations is connected to his interest in the irrational, which made him the most tragic of the poets. Focusing on the musical aspect of the *Helen's* second stasimon, the paper will examine how Euripides conveys a sense of the irrational through a new type of song, which liberates music's power to excite and disorient through its colors, ornament and dizzying wildness. Just as the New Musicians present themselves as the preservers of cultic tradition, Euripides, far from suppressing Dionysus as Nietzsche claimed, deserves to rank as the most Dionysiac and the most religious of the three tragedians.

Keywords

Euripides – tragedy – New Music – Dionysus – religion – choral self-referentiality

Introduction

The choral odes of tragedy regularly involve the Chorus reflecting upon an earlier moment in the play or its related myths. In Euripides' *Helen*, all three stasima are distanced from the action by their mood. The first choral ode follows

the successful persuasion of the prophetess, Theonoe, the working out of a good escape plan and high optimism on the part of Helen and Menelaus, but seems to ignore the progress of the play's action and takes the audience back to the ruin caused by the Trojan war. In the third stasimon, instead of singing wedding songs for Helen and Theoclymenus, the Chorus look forward in time and envisage Helen and Menelaus' joyful arrival back in Sparta.¹

The second stasimon, however, goes even further. Helen has just agreed to marry the king of Egypt, pretending that Menelaus is dead. The Chorus then narrate the myth of Demeter's search for her daughter and syncretize Demeter's rites first with the rites of the Mother of the Gods and then with those of Dionysus. The allegedly excessive distance between the content of the Chorus' song and the action of the play has led to strong scholarly condemnation of the stasimon itself, generally considered the most irrelevant ode in Greek tragedy and influenced by the New Music's irrelevance and empty aestheticism.² These two complaints—that the ode is an irrelevant interlude and that it is 'dithyrambic'—are connected, and need to be considered in more detail because they may compel us to reflect on the precise relationship of the stasimon to the action that surrounds it.

In *Poetics* 1456a25-32, Aristotle deplores the practice, started by Agathon and common in the late fifth century, of writing ἐμβόλιμα, i.e. choral interludes that had nothing to do with the play.³ Even though Aristotle ascribes such sung interludes to "other poets" and not to Euripides, later critics have misinterpreted the passage, as if Aristotle's remarks justified their own search for ἐμβόλιμα in Euripides, as Allan (2008, on *Hel.* 1301-68) has observed. Kranz's influential study of 1933, focused on narrative odes like the *Helen's* second stasimon ("die ἱστορίαι"), greatly contributed to this charge, describing ten Euripidean late odes as "fully self-contained ballad-like narratives" and labelling them "dithyrambic".⁴ The adjective 'dithyrambic', however, is useful only if it is understood in terms of poetic diction, style and meter and if it is connected to its

1 Except where otherwise noted, I follow the text as printed in Diggle 1994.

2 Cf. Whitman 1974, 65. For an overview of earlier interpretations of the stasimon, cf. Allan 2008 on 1301-68.

3 'The chorus should be treated as one of the actors; it should be part of the whole and should participate [sc. in the action], not as in(?) Euripides but as in Sophocles. With the other poets, the songs are no more integral to the plot than to another tragedy—hence the practice, started by Agathon, of singing interludes. And yet to sing interludes is quite as bad as transferring a whole speech or scene from one play to another'.

4 Cf. Kranz 1933, 252-60. On the origins of dithyramb, cf. D'Angour 1997. On dithyrambic polemics, cf. Pickard-Cambridge 1962, 59f.; Ieranò 1997, 206f.; Zimmermann 1992, 136f.; Csapo 1999/2000, 406-26; Lavecchia 2000, 30-7; Franklin 2013.

etymological sense, since it may indicate both the name of a Dionysiac choral performance and Dionysus himself (cf. e.g. Eur. *Ba.* 526).⁵

My concern here is to show that the *Helen's* second stasimon must be considered part of the Euripidean interest in religious phenomena and particularly in Dionysism, which is characteristic of his later plays (from 420 BC onwards). Euripides' interest in Dionysism provides the major link between the poet and the New Musicians. In fact, far from embodying the final collapse of the religious impulse, the New Music, which mainly affected the theatrical genres of dithyramb and drama, constitutes a revival of the Dionysian element at a time when it had come close to extinction.⁶ I intend to show that the Dionysiac context deeply influenced both the New Music and Euripides because it informed a qualitative change in music and brought about a new type of song, which liberated music's power to heighten the emotional temperature of the plot. Since the New Musicians' chief goal was to find a musical style that could speak the language of the passions, they constantly evoked Dionysiac music, cult and dance, which were especially suited to conveying emotion, and were associated with a freer and more dynamic musical style.

1 A Dionysiac Poetic

Euripides' multiple references to Dionysus, his formal innovations and his bold use of an astrophic and polymetric poetic style show that he was interested in this project of inventing a more emotive and dynamic musicality.

In the *Helen's* second stasimon, the second strophe and the second antistrophe offer an etiology of ecstatic music and associate the rites of the Mother of the gods with those of Dionysus. Even though the Dionysiac context is clearer in the second part of the ode, Euripides does not refrain from alluding to Dionysus in the first part. The Chorus begin by describing Demeter's search for her abducted daughter, Persephone—the first sign that we are not dealing

5 "Ἴθι, Διθύραμβ', ἐμὸν ἄρ-/σενα τάνδε βᾶθι νηδύν / ἀναφαίνω σε τόδ', ὦ Βάκ-/χιε, Θήβαις ὀνομάζειν, 'Come dithyramb, enter here my male womb! I proclaim to Thebes that she should call you by this name'. As Battezzato (2013, 95) notes, in *Ba.* 526 διθύραμβος is attested as the name of the god for the first time. As the name of his song (μέλος), it is first attested in Archil. fr. 120 W.²; as an epithet of Dionysus, in Pratin. *TrGF* 4 F 3.15.

6 Cf. Csapo 1999-2000, 417. For a comprehensive treatment of the presence of Dionysus in Greek tragedy, with a particular emphasis on metatheatrical "Selbstreferentialität", cf. Bierl 1991.

with an *embolimon*.⁷ They refer to Demeter as ὄρεϊα μάτηρ θεῶν ('the mountain mother of the gods'), a title which immediately emphasizes the identification of the Eleusinian goddess with the Mother of the Gods, a deity of Asian origin just like Dionysus.⁸ Although the association of Demeter and the Mother, as well as that between the Mother and Dionysus, is attested by several sources,⁹ this second stasimon is the earliest literary evidence for the blending of the two cults. The Mother's frantic search is described by δρομάδι κώλῳ literally 'on speeding foot', but δρόμας is often associated in Euripides with possession and related phenomena, sometimes in specifically Dionysiac contexts (e.g. Eur. *Hipp.* 550f. δρομάδα ναῖδ' ὅπως τε βάκχαν / σὺν αἵματι, *Supp.* 1000f. πρὸς σ' ἔβαν

7 Helen has indeed been likened to Persephone earlier in the play. In the *parodos* (vv. 175-8), she hopes that her paeon of grief will reach Persephone in the Underworld, and recalls that she was gathering flowers when abducted by Hermes (vv. 244-9; cf. *H. Hom. Dem.* 6-16). For the whole play, the underlying narrative of Persephone's myth mirrors Helen's hopes that she too may return to her family, winning release from another land of the dead (Egypt). For the identification of Helen with Persephone, linked to the parthenaic motive, cf. Zweig 1999, 165-9, Foley 2001: 303-38, Swift 2010, 218-29.

8 The Mother of the gods, also known as Cybele, was the Greek counterpart of the Phrygian goddess *Matar* (on the Phrygian nomenclature of the goddess, see Brixie 1979; for Greek nomenclature, see Henrichs 1976). Her presence in the Greek world can be noted from the sixth century BC, as shrines and cult objects dedicated to her become frequent both in Greek cities on the West coast of Anatolia and on the Greek mainland. In Greek literature, the Mother's presence firstly becomes visible in *H. Hom.* 14 and in Pindar (*P.* 3.77-9). Exhaustive treatments of the Mother of the Gods can be found in Càssola 1975; Sfameni-Gasparro 1978; Robertson 1996. For an examination of the role of the Mother in Greek Tragedy, cf. Roller 1996.

9 The process of assimilation between the two divinities can be observed throughout the Greek world from the late sixth century BC and is noticeable in the use of common cult artifacts and symbols (cf. Thompson 1937, 205-8; Nilsson 1967, 726; Metzger 1965, 22) and through the key role played by one of the Mother's sanctuaries, the *Metreon* in Agrai, in the preliminary rites of the Eleusinian Mysteries. Moreover, the fourth century Derveni Papyrus reveals an Orphic text that purports to make clear the hidden identities of the gods (Γῆ δε καὶ Μήτηρ καὶ Ῥέα καὶ Ἥρα ἢ αὐτή ... Δημήτηρ ὠνομάσθη ὥσπερ ἢ γε Μήτηρ ἐξ ἀμφοτέρων ἐν ὀνόματι: τὸ αὐτὸ γάρ ἦν) while one of the gold leaves from Thuri in southern Italy (4th/3rd century BC) juxtaposes Mother, Cybele, Kore and Demeter (*Orph.* fr. 492 Bern.). Such religious and mythological syncretism is not limited to the Orphic circles or to the use of common cult artifacts and symbols, but is also mirrored in the literary texts (cf. Pind. *I.* 7.3-5, where the poet speaks of "Demeter of the clashing bronze" employing χαλκόχροτος, an epithet characteristic of the Mother; cf. also Melanipp. *PMG* 764): what stands out in the *Helen's* second stasimon, however, is not only the syncretism between the two goddesses, but most of all the frequent references to an Asiatic venue in the traditional tale of Greek Demeter. For the literary sources and the wider contexts of fifth and fourth century syncretism, cf. Obbink 1994 and Allan 2004, 140-6.

δρομάς ἐξ ἐμῶν / οἴκων ἐκβακχευσαμένα, *Ba.* 731-3 ὦ δρομάδες ἐμαὶ κύνες, / θηρώ-
μεθ' ἀνδρῶν τῶνδ' ὕπ' ἀλλ' ἔπεσθέ μοι, / ἔπεσθε θύρσοις διὰ χερῶν ὠπλισμέναι).¹⁰

Similarly Dionysiac are the natural features that provide the backdrop to the goddess's journey: wooden ravines, rivers in flood and the sea's deep roaring waves (vv. 1304f. βαρύβρομόν τε κύμ' ἄλιον / πόθῳ τὰς ἀποικομένας). The adjective used to describe the sea's deep roaring waves, βαρύβρομος, will be also applied in the second strophe to the αὐλός taken up by the Mother when she will relent from her anger (v. 1351), and is the first of several words associated with Dionysus and chthonic forces used in this song to describe sounds. The Dionysiac association is attested by the god's most prominent cult name, Βρόμιος (v. 1364), which apparently derives from βρόμος, and is used to describe any loud roar or crush, but in this case perhaps refers to Zeus's thunder and lighting, by which Dionysus' mother was inseminated. The adjective βρόμιος returns three verses later (v. 1308) to describe the crashing sound of the κρόταλα in a striking concatenation of sound words (κρόταλα δὲ βρόμια ... κέλαδον ἀνεβόα). The κρόταλα are cymbal-like instruments made of two short lengths of wood, reed or bronze (see *Eur. Cyc.* 205) and are connected to the worship of both the Mother and Dionysus (e.g. the *Homeric Hymn to the Mother of the Gods* 3f., that mentions κρόταλα among the instruments characteristic of her worship). Together with the evocation of the χορός of Persephone and her friends, described while dancing in a circular chorus (κυκλίων χορῶν) in the moment of the Kore's abduction, the mention of the κρόταλα is the first of several self-referential allusions to choral song and dance, which connect the performance of the Chorus in the *orchestra* to that of other choruses elsewhere: this particular device, which A. Henrichs has defined "choral projection",¹¹ derives from similar conventions in choral lyric and is common to both dithyramb and New Music. Choral projection is a corollary to choral self-referentiality, that is, the self-description of the tragic Chorus as performer of *khoreia*: when

10 The syncretism of the myths of Dionysus and the Mother, which is familiar to us from the *Bacchae*, as we shall see later in detail, is well attested in the fifth century (cf. e.g. Pind. fr. 70b.5-23 M. and *TrGF* 45 F 1.1-6, a fragment ascribed to the late fifth century tragedian Diogenes, where Semele points to the syncretism of Dionysus and Cybele, and perhaps even to a dramatic Chorus of the goddess' devotees). Moreover, one of the most interesting passages comes from Euripides' *Cretans* (fr. 472 K.), where a sheer number of conflated cults is involved and where there is described a ritual in honour of Idean Zeus-Rhea-Cybele and Dionysus-Zagreus (the son of Zeus and Persephone): 'We lead a pure life since I became an initiate of Zeus of Ida and a herdsman of night-wandering Zagreus, having fulfilled the rituals of raw meat, and having held up torches for the Mountain Mother among the Courètes I was sanctified and named a *Backhos* ...'. For an analysis of the fragment, cf. Bernabé 2004.

11 Cf. Henrichs 1994/1995; 1996.

the Chorus engage in self-referentiality, their collective dramatic character becomes subsumed as they perceive and present their singing and their dancing as an emotional reaction to the events on stage; they assume a ritual posture which functions as a link between their own choral performance and the cultic reality of the City Dionysia. Far from breaking the dramatic illusion, as has often been claimed, both choral self-referentiality and choral projection draw their audiences into a more integrated theatrical experience, in which the choral performance in the orchestra merges with the imaginary cultic performances that take place in the course of each play, thus strengthening rituality by performance.¹² While rarer in Aeschylus and Sophocles, choral self-referentiality and choral projection become a hallmark of both the New Music and Euripides' late style. In both the New Musicians and Euripides, however, choral self-referentiality and choral projection are more prominently connected with Dionysus and his rituals than with any other deity. Euripides evokes music 30 times in plays datable to 420 BC and later, and in 23 instances the music evoked is Dionysiac. Comparably, Euripidean Choruses refer to other Choruses dancing 28 times; all but one of these instances are from plays around and after 420 BC. Most are references to maiden Choruses,¹³ and 11 of these are said to be circular dances, like the dances traditionally associated with Dionysiac cult and the dithyramb.¹⁴

12 Cf. Bierl 2013, 221.

13 From the later 420s onwards, Euripides' choruses tend not only to be women, but Asiatic women (*Hecuba*, *Trojan Women*, *Phoenissae*, *Bacchae*, *Phaeton* and *Andromeda*), with the exception of *Iphigenia in Tauris* and *Helen*, where the choruses are Greek women held captive in Eastern Lands. Such womanly and barbarian imagery was also typical of the New Music: the most famous New Musical monody, in Timotheus *Persians*, is sung by delirious Persians, while the opposition between the Dorian mode, 'the only true Greek mode', considered an expression of manliness and self-control (cf. Plato *Rep.* 398e-9c), and the Mixolydian, Tense Lydian and Phrygian modes, effeminate and vulgar, may be considered a distinctive feature of the controversy around the New Music (e.g. *TrGF* 4 F 3.17, where Pratinas opposes New Music to 'Dorian dance-song'; cf. Pagliara 2000, 193-201, Csapo 2004, 232-5). The effeminacy, on the other hand, was linked to the poetic ornamentation of the New Music's style—referred to as ποικιλία (cf. Pl. *R.* 601a-b, *Grg.* 465b, *Phdr.* 239b, Cic. *De Orat.* 3.25.100)—and particularly to Agathon (cf. Aristoph. *Thesm.* 121, where Agathon's song is called 'womanish'; cf. also *PCG* fr. 178, where Aristophanes appears to have called effeminate pipe music 'Agathonian'). On the concept of ποικιλία, cf. Kranz 1933, 242f, Restani 1983, 180-3, Zimmermann 1992, 123f, LeVen 2013, 229-42.

14 Circular dances in choral odes: *El.* 178-80, 434, *Her.* 690, *Ion* 1076-86, *IT* 427-9, 1143-5, *Hel.* 1312, *Phoen.* 235, 786-92, *IA* 50, *Bacch.* 567. Cf. also 26 n.

2 Myth

In the *Helen*'s second stasimon, as I noted above, by means of choral projection and choral self-referentiality Euripides stages a concrete ritual dance, a divine *khoreia*, that will solve the stasimon itself. After the allusions to κρόταλα and circular dances in the first strophe, the first antistrophe narrates the Mother's unforgettable grief (v. 1337 πένθει ἀλάστω) and the power of her anger, which makes the earth infertile and causes humans and animals to starve, thus depriving the gods of sacrificial offerings. While the famine's impact recalls Demeter's myth and is similarly described in *H. Hom. Dem.* 305-12, the emphasis on the remoteness, coldness and harshness of the location expressive of the goddess's grief (vv. 1323-6) makes clear the adaptation of the original myth, centered around Eleusis, to the syncretistic figure of Mother-Demeter. The mention of Mount Ida (v. 1324), where her journey seems to end in apparent defeat, also confirms the syncretism between Demeter and the Mother, since one of the Mother's cult names was Idean Mother (cf. Eur. *Or.* 1453f. Ἰδαία μᾶτερ / μᾶτερ ὀβρίμα ὀβρίμα, and Strabo 10.3.12). Furthermore, the reference to Mount Ida, repeatedly mentioned both as site of the judgement of Paris (vv. 24, 357-9, 1059) and as a synonym for Troy (658), brings her story in association with Helen and also anticipates the main syncretism of the stasimon. In the second strophe, the Chorus shift to Zeus and his attempt to mollify the goddess through the sending of the Muses and the Charites, frequently linked together because of their common connection with poetry, song, and dance. The Charites, before they became the Graces familiar to us from Latin poetry (e.g. Hor. *Carm.* 1.4.5-7) and Botticelli's picture, were ancient Minyan goddesses (cf. Pind. *O.* 14.3f., Hes. *Th.* 64-77) and their cult was associated with that of Dionysus in several cities. Zeus's directive to the Charites and the Muses, whose urgency is marked by the repeated imperatives (vv. 1341f. βᾶτε ... ἴτε), relies upon the traditional consolatory power of music (cf. e.g. Hes. *Th.* 98-103), but his exhortation to alleviate the Mother's grief 'with a joyful cry of alalai' (v. 1344) explicitly combines the choral song and dance with the ecstatic cries characteristic of the ὄργια of Dionysos; the verb ἀλαλάζω will indeed be used in the *Bacchae* in reference to the ritual cry (vv. 577, 592f. ἰὼ βάκχαι, ἰὼ βάκχαι / ... / Βρόμιος ὃδ' ἀλαλάζεται στέγας ἔσω).

In the following verses, the Chorus offer an aetiology of the ecstatic music which resembles that of the *Bacchae* in its focus on the cult itself and on the cultic instruments: the rumbling voice of bronze refers to the cymbals characteristic of both the Mother's and Dionysus' cults, even though the somewhat curious phrase χαλκοῦ δ' αὐδᾶν χθονίαν (v. 1346) may recall the sound of the bronze gong struck by the priests of Kore at Eleusis, thus alluding to Demeter's

cult (cf. Apollod. *FGrHist* 244 F 110; see Burkert 1962, 40). The subsequent description of the τύπανα, however, removes any doubt about the reference to the oriental cult; τύπανα are ‘tambourines’ or ‘kettledrums’, which consisted of a wooden hoop covered on one side with hide and are mentioned in the *Homeric Hymn to the Mother of the Gods* as characteristic of her worship along with the above-mentioned κρόταλα (*Hel.* 1308) and the forthcoming αὐλός (vv. 3f. ἥ κροτάλων τυπάνων τ’ ἰαχὴ σὺν τε βρόμος αὐλῶν εὖαδεν). The kettledrums are described as βυρσοτενῆ (lit. ‘with skin stretched over’), the same adjective that will be employed in the *Ba.* 123-34, where the τύπανον is referred to deictically as βυρσότονον κύκλωμα τόδε (“this drum of tightened hide”) during the aetiological narration of the origin of the instrument (vv. 120-34):

ὦ θαλάμευμα Κουρή-	120
των ζάθεοί τε Κρήτας	
Διογενέτορες ἔναυλοι ἔνθα τρικόρυθες ἄντροις	
βυρσότονον κύκλωμα τόδε	
μοι Κορύβαντες ἤϋρον·	125
βακχείᾳ δ’ ἀνὰ συντόνῳ	
κέρασαν ἀδυβόα Φρυγίων	
αὐλῶν πνεύματι ματρός τε Ῥέας ἐς	
χέρα θήκαν, κτύπον εὐάσμασι Βακχᾶν·	
παρὰ δὲ μαινόμενοι Σάτυροι	130
ματέρος ἐξανύσαντο θεᾶς,	
ἐς δὲ χορεύματα	
συνήψαν τριετηρίδων,	
αἶς χαίρει Διόνυσος.	

O secret chamber of the Kouretes and you holy Cretan caves, parents to Zeus, where the Korybantes with triple helmet invented for me in their caves this circle, covered with stretched hide; and in their excited revelry they mingled it with the sweet-voiced breath of Phrygian pipes and handed it over to mother Rhea, resounding with the sweet songs of the Bacchae; nearby, raving Satyrs were fulfilling the rites of the mother goddess, and they joined it to the dances of the biennial festivals, in which Dionysus rejoices.

In the *Bacchae*, the Korybantes invented the τύπανα and mingled it with Phrygian pipe sound (v. 127). In *Helen's* ode, however, it is Aphrodite (vv. 1348f. καλλίστα ... Κύπρις) who first takes up the cymbals and the kettledrums (v. 1348 τότε πρῶτα): therefore, it is Aphrodite, who is not explicitly sent

by Zeus, to state the musical aetiology of the ῥογία of the Mother of the Gods and to soothe her grief. Since it was Zeus himself who expressed the need for the orgiastic rites, the strophe clearly connects two Olympian Gods with two oriental deities and may be considered an official exhortation to practice the orgiastic cults, as Cerri (1987, 199) has argued. Moreover, since the Mother smiles (v. 1349 γέλασεν), the strophe seems also to suggest the power of these cults. In the *Homeric Hymn to Demeter*, Demeter gave up her anger only when reunited with her daughter; in this ode, the goddess will not get her daughter back, but when she takes into her hands the deep roaring pipe (v. 1351 βαρύβρομον αὐλόν) she smiles, won over by the exciting sound of the orgiastic music. This 'deep roaring pipe' further confirms the emotional and Dionysiac quality of the music: because of its distinctive features, the αὐλός—considered the instrument of *bakkheia* by Aristotle (cf. *Pol.* 1342b)¹⁵—was intimately associated with the expression of strong emotions and was not by chance the instrument *par excellence* of the New Musicians.¹⁶ The αὐλός offered a much greater range and variety than other instruments and was thought capable of imitating all sounds and voices (cf. Pind. *O.* 7.12, *P.* 12.19, *I.* 5.27, who calls the songs of the pipes πάμφωνον, 'every-voiced').¹⁷ As well as being versatile and mimetic, it was also characterized by another peculiar quality, its volubility: unlike strings, its sound depended on factors present only at the moment of performance (e.g. the pressure of the performer's breath, the tension and position of the lips on the reed)¹⁸ and was thus perceived as being indistinct. Moreover, by contrast to the distinct and articulated sound of stringed instruments, the αὐλός glide from one note to another, giving the impression of a confused flux of

15 'Among the *harmoniai* the Phrygian has the same power as does the *aulos* among instruments: both induce ecstasy and emotion. For all Bacchic revelry and all dancing of that sort is done to the *auloi* more than to any other instrument, and these things also find what is appropriate to them in Phrygian melodies, out of all the *harmoniai*. Composition itself makes clear how the dithyramb is by common consent a Phrygian form'.

16 According to Csapo (2004, 217), the greater reliance on the αὐλοί in theatrical music was one of the features that influenced the style of the New Music. Because of the instrument's ability to produce much sound and sustain long phrases, the New Musicians developed a type of syntax that corresponded to this musical feature. Moreover, in connection with this linguistic aspect, Csapo's article also underlines a more psychological element: the ability of the αὐλοί to rouse emotions and bypass reason in an appeal to the senses and feelings, i.e. the highly criticized priority of music over logic. For a superb synthesis on the use of the αὐλός in Athens, cf. Wilson 1999.

17 In *Pl. R.* 399d3-6 this trait causes Socrates to exclude makers and players of the αὐλός from the city, while Aristotle in *Po.* 1461b30-2 condemns αὐλός players who represent absolutely everything.

18 Cf. Barker 1989, 106f.

sound, as Aristoxenus observed (*Harm.* 43.12-24).¹⁹ Euripides, who is said to have 'first used a large range of notes and more variety than his predecessors',²⁰ proves to make a conspicuous use of the αὐλός and frequently refer to the instrument when he describes music-making in his tragedies.²¹

The epithet here applied to the αὐλός, βαρύβρομος, is the same adjective which described the sea's waves in the first strophe, as I noted above; and the description of the pipe's sound (ἀλαλαγμῶ) suggest a reference to the Phrygian αὐλός mentioned in the *Bacchae*. Both βαρύβρομος and ἀλαλαγμός suggest that the Mother is won over by a raucous, wild and self-forgetful music, more like the music of nature than of men in their cities.

Consolation, the strophe seems to suggest, may be found in the irruptive experience of ecstatic cults, in music and in the transformative power of dance that provide emotional release. It cannot derive from any human discourse, from λόγος, from σοφία, which result in skepticism, rational theology, or an empty, sophistic atheism, as the play has shown. In the first stasimon, for example, the Chorus clearly indicated that no human discourse can comprehend the gods, and that human searching is always going to collide with the farthest limit (v. 1140 μακρότατον πέρας), while the religious expectations embodied by the play's prophetess, the pious Theonoe, resulted in concepts like νοῦς and γνῶμη which seem to offer small handholds for faith. But Euripides could not be satisfied with sophistic concepts: throughout his whole work he asserts that it is emotion, and not reason, that determines the human condition. The assertion is scattered in all his plays, even in his earlier ones: for example, in *Medea* (431 BC), Medea says: 'I recognize what evil I am about to do, but my passions (θυμός) are stronger than my counsels (βουλευμάτων)'. Her reason can judge her action, but cannot influence it. And in *Hippolytus* (428 BC), the Nurse seems to state what may be considered a doctrine of the irrational (vv. 189-97):²²

πᾶς δ' ὁδυνηρὸς βίος ἀνθρώπων
 κοῦκ ἔστι πόνων ἀνάπαυσις
 ἀλλ' ὅ τι τοῦ ζῆν φίλτερον ἄλλο
 σκότος ἀμπίσχων κρύπτει νεφέλαις.

190

19 'Pipes are in flux and never stay the same, more than any other instruments they wander, because of the craft of pipe-making, because of the manual techniques, and because of their peculiar nature'.

20 Anon. *Trag.* 5.39 Browning.

21 Other passages in which Choruses refer to the αὐλός are *Heracle.* 892, *El.* 435, 879, *HF* 683, 878-95, *Tro.* 544, *Hel.* 171, 1483, *Ph.* 791, *IA* 576-8, 1036, *Ba.* 124-8, 156-60, 380.

22 Cf. Dodds 1929, 101-4.

δυσέρωτες δὴ φαινόμεθ' ὄντες
 τοῦδ' ὅ τι τοῦτο στίλβει κατὰ γῆν
 δι' ἀπειροσύνην ἄλλου βιότου
 κοῦκ ἀπόδειξιν τῶν ὑπὸ γαίης,
 μύθοις δ' ἄλλως φερόμεσθα.

195

All the life of Man is pain, and there is no rest from trouble. But that Other-whatever it be—that is more precious than life, darkness enshrouding covers it in cloud. A nameless thing that shines across the world: and it is plain that for this we are sick with longing, because we have no knowledge of another life, because we have no revelation of the things under earth, but still drift vainly upon a tide of legend.

The Nurse's doctrine will return more confidently enunciated in the *Bacchae*'s fourth stasimon, where the Chorus will triumphantly sing (vv. 1005-7): τὸ σοφὸν οὐ φθονῶ / χαίρω θηρεύουσα: τὰ δ' ἕτερα μεγάλα / φανερά τ', 'I do not envy wisdom, but rejoice in hunting it. But Other Things are great and shining'. The 'Other-whatever it be' and the 'Other Things' mean the irruption into normal life of the mystery and concern the dark, irrational side of man's nature, which is enacted and mirrored in the orgiastic rites. Far from being a rationalist or a hidden devotee of the sophists, Euripides was preoccupied with the irrational throughout his whole career, but the New Musical revolution gave him the means to express it. The New Musicians' innovations were deeply influenced by the Dionysiac imagery: we might say, indeed, that the New Musicians' style was striking because it aimed to preserve the mysterious and evocative language of Dionysiac cult. In fact, as Lavecchia (2013, 75) has recently argued, dithyramb always remained the song of the god *Dithyrambos* and of initiatory ἐνθουσιασμός. In order to epitomize Dionysus' cult, the new dithyrambists sought a style rich in verbal sound effects, far-fetched metaphors, elaborate periphrases, riddling expressions and multiple epithets, which were thrown into relief by an accumulative syntax that tended to pile up phrases and to impart an exclamatory force. They created a "grammar of the irrational" that needed an "irrational" musical style which aimed to convey the experience of Dionysus and thus to disorient and intoxicate the audience through its intensity, colours, ornament, mimicry and dizzying wildness. While harkening back to early origins and aiming to express the irrational power of the god, they aspired to be modern, sophisticated poets and musicians: in their songs, as I shall argue, they blended the posture of hierophant with that of *poeta doctus*. Their use of language stands halfway between the magical use of cult language and the

development of the *recherché* language of Alexandrian poetry, initially puzzling on the surface, but appropriate and deeply comprehensible to initiates.²³

3 Ryth: A Divine *Khoreia*

This is exactly the case of the *Helen's* second stasimon, where the Mother's irrational consolation and most of all the reason for the Mother's anger against Helen, which is described in the second antistrophe, are narrated in terms appropriate to initiates and highlight the mysterious forcefulness of the god's rites. Furthermore, the final stanza explicitly syncretizes the ὄργια of the Mother of the Gods with those of Dionysus, thus confirming what the whole stasimon has hinted at. This shows how Euripides artfully adapted the new dithyrambists' and New Musicians' innovations to his dramaturgical purposes. The Chorus alleges that Helen has provoked the Mother's anger by failing to honour her rites, and then describe the rites of the Mother and of Dionysus in the same terms that will describe the ὄργια in the parodos of the *Bacchae* (vv. 73-82), which may be considered a *locus parallelus*.²⁴

ὦ μάκαρ, ὅστις εὐδαίμων	
τελετὰς θεῶν εἰδὼς	
βιοτὰν ἀγιστεύει καὶ	
θιασεύεται ψυχὰν	75
ἐν ὄρεσσι βακχεύων	
ὁσίοις καθαρμοῖσιν,	
τά τε ματρός μεγάλας ὄρ-	
για Κυβέλας θεμιτεύων,	
ἀνὰ θύρσον τε τινάσσω,	80
κισσῶ τε στεφανωθείς	
Διόνυσον θεραπεύει.	

Blessed is he who, being fortunate and knowing the rites of the gods, keeps his life pure and has his soul initiated into the Bacchic revels, dancing in inspired frenzy over the mountains with holy purifications, and who, revering the mysteries of great mother Cybele, brandishing the thyrsus, garlanded with ivy, serves Dionysus.

23 Cf. Ford 2013, 318. Perceptive observations on the language of the New Music can be found in LeVen 2014, 150-88.

24 Cf. Cerri 1987, 199f.

While the *Bacchae* passage is introduced by the formula of beatitude that was traditional in Greek poetry but had a deeper meaning in the language of the mystery cults (v. 73 ὦ μάκαρ, ὅστις εὐδαίμων), the *Helen* passage is introduced by μέγα τοι δύναιται, an expression which equally proclaims the beatitude of the initiates and the great power that lies in the worship of the two gods. Just like the *parodos* of the *Bacchae*, this ode's passage lists features of maenadism and offers a systematic evocation of the rites, which is strengthened by the choral performance itself and results in a moment of pure ritual *khoreia*, in full accordance with the tragic Chorus's original intention: the νεβρῶν ... στολίδες ('the dappled robes of fawnskin', vv. 1358f.) are the characteristic costume of Bacchantes, the 'ivy leaves wound around the sacred wands' (vv. 1359f.) describes the θυρσός, symbol *par excellence* of Dionysiac energy and potential violence, and the night festivals (παννυχίδες) are equally at home in the cult of the Mother and of Dionysus. Dionysus is also directly mentioned and appears to become the main character of the stanza, since the Chorus employs the most frequent title of the god when they sing of 'the hair streaming out of *Bromios*' (v. 1364 βακχεύουσά τ' ἔθειρα Βρομίω). *Bromios* is the ideal complement to the Mother's κρόταλα βρόμια mentioned in the first strophe (v. 1308), while the participle βακχεύουσα ('act like a Bacchant') personifies ἔθειρα and highlights the importance of the god's name. This tendency to pile up Dionysus' names and epithets is both characteristic of ritual language and put to bold use in the new dithyramb and the New Music.²⁵ Furthermore, the Chorus completes the musical etiology started in the previous stanza by describing the shaking of the ῥόμβος, an instrument used in both the cults and which consisted of a shaped piece of wood whirled round on the end of a string to produce a demonic roaring noise. Once again, the reference to a specific instrument and the detailed description of the shaking of the ῥόμβος whirled in circles high in the air (vv. 1362f. εἰλισσομένα/κύκλιος ἔνοσις αἰθερία), suggest both the wild and self-forgetful power of this music and the circular mode of the dithyrambic and Bacchic dances.²⁶ The description of music, combined with the

25 Cf. Philodamus, who summons Dionysus as 'Dithyrambos, Bakchos, Euios, bull, ivy-haired, *Bromios*' (*Pae.* 39.1-3 Käppel Διθύραμβε Βάκχ', εἰ ὕιε, ταῦρε, κῖσσοχαῖτα, Βρόμι') and Pratinas, who compounded *dithyrambos* with the obscure *thriambos* in an expansive call to the god (*TrGF* 4 F 3.16-17 θριαμβοδιθύραμβε, κισσόχαιτ' ἄναξ, <ἄκου> ἄκουε τὰν ἐμὰν Δώριον χορείαν). This tendency can also be seen in Pindar's Dithyramb for Athens, when he introduces Dionysus, 'the ivy-knowing one whom we mortals call Roarer and Shouter' (fr. 75.9f. M. τὸν κισσοδαή θεόν./τὸν Βρόμιον, τὸν Ἐριβόαν τε βροτοὶ καλέομεν).

26 Εἰλίσσω, together with δινεύω, is the poetic *vox propria* for the circular dances. Words from the root εἰλι- occur fifty-two times in Euripides (never in Aeschylus, three times in Sophocles; cf. *Ar. Ra.* 815, 1314, 1348, who parodies this usage as a Euripidean and New Musical tick) and are especially used of cultic dancing (and particularly dances of Nereids

meticulous description of the ritual equipment, paraphernalia, festivities and with an extremely detailed illustration of the ecstatic movements results in a multi-media presentation where melodic, visual and kinetic stimuli converge and by which the spectators undergo an emotional and destabilizing experience that was an essential component of the experience of the god Dionysus for his worshippers.²⁷ Furthermore, since through their actual singing and dancing the Chorus members recreate the object of their song and hence actually perform a ritual *khoreia*, choral self-referentiality and choral projection are connected and contribute to create a mimesis between words, actions and sense impressions that was characteristic of the New Musicians songs and that manifests the god's power through theatrical and performative means.²⁸ In such a systematic evocation of the Dionysiac rites, in such a triumph of movements, songs and dance, what could be the fault of Helen? Why has she attracted the Mother's wrath, as the κόραι explicitly sing? What has she burnt that was forbidden in the θαλάμαις,²⁹ the sacred caves where the rites of the Great Mother were celebrated and that also have a place in the cult of Dionysus? And what does the mysterious final line, where the Chorus accuse Helen of having gloried in her beauty alone (μορφῇ μόνον ἠϋχεῖς), mean?

Conclusions

I shall argue that the enigmatic fault of Helen is directly linked to the exhortation to the practice of the orgiastic cults that the stasimon has offered. As is well known, in fact, the Helen presented in Euripides' play is the *new* Helen, the Helen who never went to Troy and remained faithful to her husband, and

or maenads, or Dionysiac dolphins, as Csapo 2003 has shown; cf. also *Orph. H.* 23.7f., 11 and 24.3, where Nereids and dolphins are said to circle about the waves and are praised for having first revealed the rites of Dionysus and Persephone). Since the noun ἔλιξ denotes 'the tendril of the wine' and 'ivy', the sacred plant of Dionysus, the Dionysiac quality of the words from the root ἔλιξ- cannot be questioned.

27 Cf. Bierl 2013, 212.

28 Cf. Steiner 2011, 309. See also Barker 2007, 21.

29 The reading ἐν θαλάμαις (for the transmitted θαλάμοις) is suggested by Kannicht. Although Euripides uses the word θαλάμη of a variety of subterranean spaces (cf. e.g. *Supp.* 980, where it indicates Capaneus' grave, or *Ph.* 931, where it is the lair where the Theban dragon was born), the present passage exploits the word's status as "a vox propria for a sacred cave" (Dodds on *Ba.* 120; cf. *schol. Nic. Alex.* 8 Λοβρίνης θαλάμαι: τόποι ἱεροί, ὑπόγειοι, ἀνακείμενοι τῇ 'Ρέᾳ, and Eur. *Ion* 394, where the oracle-cave of Trophonius is his θαλάμαι). Such sacred caves where the earliest cult centers for Cybele, the Great Mother, in Crete and Anatolia.

most of all the Helen who repeatedly deprecates her beauty. Nevertheless, despite this deprecation, Helen will consciously seduce all the men she meets during the play and will hence reaffirm the glory of her fatal beauty in order to get away from Egypt. The second stasimon comes immediately after the scene of the crucial seduction of Theoclymenus, which permits the escape of Helen and Menelaus and brings back the traditional Helen, a charming liar addicted to the deceptive power of λόγος. Situated at this pivotal moment of the play, the stasimon, through the evocation of a wild and more irrational universe contrasting the tainted world personified by Helen, might be considered a nostalgic exhortation to escape the world of δόλος and to return to a more authentic existence. But Helen relies only on her beauty, thus rejecting the ἐνθουσιασμός offered by the ὄργια: Euripides may be referring to Helen's refusal to change, her emphatic resistance to the experience of ecstatic cults that had softened the Mother's grief.³⁰ Helen's figurative refusal could represent the poet's final exhortation to embrace the irrational side of human nature and to practice the orgiastic cults: the ritual remedy, as the Mother's consolation and the fact that she does not get back her daughter have shown, is fragile and only temporary, because the Dionysiac promise of happiness is for this world, not for the next, and yet the irruptive experience conveyed by songs, music and dance may be the only conceivable diversion from unanswerable questions, or unforgettable griefs (v. 1337).³¹ Therefore, far from suppressing religion and following the dithyrambic dispositions to write irrelevant ἐμβόλιμα, Euripides displays his deeply religious preoccupations and his attempt to create moments of pure ritual *khoreia* in full accordance with the intentions of the New Musicians, who tried to revive Dionysiac religiosity by restoring traditional elements and by creating an orgiastic atmosphere on all levels of the performance.³² Since both dithyramb and tragedy were originally ritualistic, meant to praise their patron god Dionysus in the City Dionysia, the constant evocation of the ritual attributes, music and dance and the repeated evocations of the god's power conveyed by means of choral self-referentiality and choral projection, far from being a merely aesthetic trend, show that both Euripides and the New Musicians aimed to preserve the original cultic tradition. Furthermore, since they were modern and sophisticated poets, they were fully aware that drama and songs had come a long way since their ritual beginnings, and that they

30 Cf. Cerri 1987, 206f. For two different interpretations of the Mother's grief linked to the *anodos* pattern and to Helen's symbolic identity as a "quasi-parthenaic" figure, cf. Voelke 1996, 294-6; Foley 2001, 303-7; Swift 2010, 35-7.

31 Cf. Wolff 1973, 74.

32 Cf. Nikolaidou-Arabatzi 2015, 26.

could only recall and re-enact, not without nostalgia, the distant origins of the rite.

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New Music and Dancing Prostitutes

Performance and Imagery of Erotic Dancing in the Musical Criticism of Old Comedy

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Abstract

Old Comedy often brings prostitute-like dancers on stage while parodying the New Music. This paper argues that such dances were reminiscent of sex practices, and supports this view with dance-historical and semantic evidence. For the history of Greek dance, I survey the literary evidence for the existence of a dance tradition that represents lovers and their acts, and which would easily provide Comedy with dance vocabulary to distort. The semantic analysis of three comic passages, all criticising the New Music in sexual terms, shows a consistent overlapping between the semantic fields of eroticism and of bodily movement, with several terms indicating both figures of lovemaking and figures of dance. By performing comically revisited erotic dances or by verbally alluding to them, prostitutes would powerfully embody the conservative criticism of Old Comedy against the new trends in dance promoted by the New Music.

Keywords

Old Comedy – New Music – comic dances – erotic dances

1 The Dancing Prostitutes of the New Music

It is well known that Old Comedy resorts to explicit sexual imagery to parody the composers of the New Music as lascivious and their works as

defying the conventional norms of *decorum*.¹ Curiously, these composers are occasionally also equated with dancing prostitutes. The present contribution considers the ways in which comedy parodies the New Music through comically revisited erotic dances, and pays special attention to three cases, namely *Thesmophoriazusae* 95-133 = T1, *Frogs* 1301-28 = T2, and Pherecrates fr. 155 K.-A. = T3, whose texts and translations can be found in the Appendix. Apparently, such erotic dances are meant to brand as (morally) degenerate not only the representatives of the New Music, but also the innovations that their experimentalism would inevitably produce in the field of dance. As criticism against musical innovations is expressed through sexual imagery, it seems only natural that this criticism and its peculiar vocabulary also apply to the related dances.

In analysing the three texts that are key to my argument, the first step is to consider how comedy brings dancing prostitutes (or at least, as we shall see in T3, prostitutes making allusions to dance) on stage to parody the New Music.²

In T1, Agathon sings and dances, switching schizophrenically during a fake *amoibaion*-song between two female identities:³ as a coryphaeus he pretends to be a priestess; as a chorus, a group of Trojan maidens. Inlaw points out the queer looks of Agathon and the incongruence of his props (139, οὐ ξύμφορα),⁴ which include items as improbable as a bass and a saffron gown, a lyre and a hairnet, an oil-flask and a breast-band.⁵ Even Agathon's choice of words alludes to this confusion of genres: for example, he presents the κίθαρις as 'mother of the hymns' and as 'masculine in sound' (124f.).⁶ The Asiatic touch of his song, which links Apollo with Troy rather than with Delphi or Delos, mentions the Asian lyre (120) and the Phrygian Graces (121f.), and is well suited to Greek

1 This is exemplified not only by the texts we shall analyse in this paper, but also by Strattis fr. 71 K.-A., which addresses the Muse who inspires Euripides as a prostitute, by Aristoph. fr. 930 K.-A. (αὐτὸς δείξας ἐναρμονίως [vel ἐν ἁρμονίαις] χιάζων ἢ σιφινιάζων), where two composers of the New Music—Democritus and Philoxenides—are brought into connection with the *pedicatio* (see the lexicographers *sub vocibus* χιάζειν and σιφινιάζειν; cf. Prauscello 2004, 336f.; De Simone 2008, 482), and by several places in Aristophanes' plays: e.g. in *Nub.* 961-72 the opposition between old and new education is related to musical as well as to sexual practices.

2 Peponi (2012, 95-153) offers a wide-ranging, multi-perspective, and elegant study of the erotic conceptualisations of *mousikē* in ancient Greek (and modern) literature.

3 *Schol. in Aristoph. Thesm.* 101: 'Ο Ἀγάθων ὑποκριτικὰ μέλη τέως ποιεῖ. ἀμφοτέρω δὲ αὐτὸς ὑποκρίνεται. μονωθεὶς δὲ Ἀγάθων ὡς πρὸς χορόν, οὐχ ὡς ἐπὶ σκηνῆς, ἀλλ' ὡς ποιήματα συντιθεῖς. διὸ καὶ χορικὰ λέγει μέλη αὐτὸς πρὸς αὐτόν, ὡς χορικὰ δέ. Pretagostini (1997, 119 n. 8) mentions Fraenkel as the only endorser of the view that the chorus here sings with Agathon.

4 For a full-length list of womanly props of seduction see e.g. Aristoph. fr. 332 K.-A.

5 On Agathon's looks and costume see Muecke 1982, 49-51. Recently, Medda (2017) has discussed in depth the transvestism of *Thesmophoriazusae*.

6 As a string instrument, the κίθαρις may also be related to the New Music, as in *Ra.* 1285-95, for old-fashioned dramatic music was usually provided by the *aulos*.

fantasies about the lascivious habits of the barbarians from the East.⁷ This display of effeminacy matches the real Agathon, whose delicate beauty is recalled by ancient testimonies.⁸ In contrast to the paratragic piousness of Agathon's words—and with the reference to the 'involute virgin' Artemis—the internal spectators describe his performance as lustful and respond to it with sexual excitement (130-5).

While it is generally believed that the "erotic and titillating effects [of Agathon's performance] are due to the metre and the music",⁹ I surmise that such are also—perhaps chiefly – the effects of the dance.¹⁰ In this regard, it is noteworthy that Inlaw compares Agathon to the prostitute Cyrene by using, twice, the verb ὀράω (97f.: 'What, am I blind or something? I don't see any man here at all; what I see is Madame Cyrene'), and that he does so *before* Agathon's song actually begins: the comparison, therefore, seems to describe something that can be seen, not heard. This leaves only Agathon's looks, movements, and dancing as options. Immediately afterward (99), Euripides requires silence because Agathon is now 'preparing himself to sing' (μελωθεῖν αὖ παρασκευάζεται): I believe the imminence of Agathon's song and dance becomes clear for those who *see* the play because he started not only the vocal warm-up (διαμινυρίζεται), but also the dance.¹¹ The opening of his performance is compared to anthills, μύρμηκος ἀτραπούς (100), that is, to the anthills' 'elaborate tracks and windings and circular passages'.¹² But, what exactly do the circular tracks of ants resemble?

This spatial metaphor is most fitting in indicating not only melodic, but also dancing patterns. This understanding of μύρμηκος ἀτραπούς is corroborated by two circumstances. On the one hand, winding anthills are particularly apt at indicating the dances of the New Music, which in Comedy are constantly parodied as twisting and circling abnormally; to mention just one telling example, Cinesias is addressed in *Birds* as follows—'Why have you come here circling in circles with crooked foot?' (1379, τί δεῦρο πόδα σὺ κυλλὸν ἀνὰ κύκλον

7 On the orientalising, voluptuous, and effeminate touch of Ionic metres see Dale 1968², 124; Sommerstein 1994, 164; Austin and Olson 2004, 88.

8 Lévêque 1955, 35-53; Henderson 1975, 219-20; Pretagostini 1997; Duncan 2006, 27-32; LeVen 2014, 120.

9 Austin and Olson 2004, 87.

10 Accordingly, Agathon would start to dance accompanied by the instrumental music shortly after he is rolled on with the *ekkyklēma* (cf. 95, while 261 mentions Agathon's bed) and before his lyric begins.

11 The instrumental music would begin here as well; cf. Aristoph. *Thesm.* 1175-7, where the *aulos* music starts shortly before the dance.

12 Ael. *NA* 6.43, recalled by Austin and Olson 2004.

κυκλεῖς).¹³ Of course, comedy cannot be expected to describe what it parodies objectively, but the texts that accompany the song and dance performances of the New Music (such as the choral songs of Euripides' late production) very often speak of circular dances, and Csapo has shown how projections of circular dancing are important to the New Music because of their hyper-traditionalist cultic implications.¹⁴ On the other hand, twisting tracks of ants and other insects also recur in comic texts that parody the *dancing style of the New Music*. To mention examples we will come back to later on, Pherecrates fr. 155.23-8 K.-A. first compares the art of Timotheus with 'perverse anthills' (ἐκτραπέλους μυρμηκιάς),¹⁵ then that of Philoxenus with a radish criss-crossed by caterpillar tunnels (ὥσπερ τε τὰς ῥαφάνους ὄλην καμπῶν με κατεμέστωσε, with a pun on the similar words καμπή, 'winding' and κάμπη, 'caterpillar'),¹⁶ and in Strattis fr. 71 K.-A. the bugs (πρασοκουρίδες) are said to wind their dances (χοροὺς ἐλίσσουσαι) among the vegetables in a garden.

Also T2 presents dancing prostitutes while parodying the New Music. It is a much debated question whether the dancer who plays the Euripidean Muse is old and ugly, or young and beautiful. In general, throughout the history of dance and across different dance cultures, dancers are very much expected to match their roles in physical appearance, and plenty of ancient sources confirm that this is also the rule in Greek dance;¹⁷ as a consequence, a danc-

13 By the way, Cinesias' foot is said to be 'crooked' (κυλλός) not because he is a cripple, but to make fun once again of his choreographies, whose whirls allegedly made the dancers look bandy-legged. This is suggested by Lawler (1950), followed by Borthwick (1968, 67) and Baltieri (2016, 230).

14 See Csapo (2008 and, most recently, 2017). See also Henrichs (1994-95) for methodological remarks on how to interpret poetic references to dance.

15 Cf. Borthwick 1968, 70: "the antimage comes from the winding galleries of an ant-heap rather than ... from the actual tracks along the surface of a column of ants".

16 καμπῶν is a widely accepted emendation by Elmsley, instead of the MSS κάμπτων.

17 Dancers, choreographers, and theatre makers know from experience that the looks of the dancer greatly contribute to the success of the performance, and dancers are also chosen according to how they fit the role they are to dance. For example, Romantic Ballet required feeble and ethereal ballerinas like Marie Taglioni to impersonate its fae-like, dreamy characters, while Balanchine preferred athletic, big, and long-legged dancers to embody the powerful notion of ballet he created at the New York City Ballet. As for ancient Greece, the poems that were danced (such as choral, tragic, and comic poems) pay considerable attention to the dancers' attire, props, and dresses, and make clear that looks was not only important in itself, but also had to be appropriate for the role. In the dance described in Xenophon's *Symposium*, for example, the dancers playing Dionysus and Ariadne are said to be young and beautiful; for later examples of dancers matching their roles see Lucian, *De salt.* 76. Interesting examples concerning female dancers are recalled by May (2008, 348 n. 30): "A small *pantomima* dancing tall women was derided for dancing Andromache or the kidnapping of Helen (*Anthologia Latina* 12.310) and kindly

er resembling Cyrene should rather be expected to be young and beautiful. Also, one might wonder why Aristophanes would rob his male audience of the pleasure of a titillating dance once he has cleared the stage for a solo female dancer who, reportedly, is just as familiar with the *figurae Veneris* as a famous exotic prostitute. As remarked by Borthwick, "it is curious how many commentators on *Frogs* assume that, because in the original play [which Aristophanes here parodies] Hypsipyle was elderly, and perhaps decrepit, the 'Muse of Euripides' must now resemble her tragic stage character".¹⁸ Considering that Aristophanes loves to bring fair and lightly dressed girls on stage,¹⁹ Borthwick concludes, rightly in my view, that the dancer of T2 is "the ancient equivalent of a go-go girl, one of the *orchestrides* one sees depicted on Athenian vases ... a 'flaunting harlot'". For her, the half-naked dancer performing towards the end of *Thesmophoriazusae* (1173-96) provides a proper term for comparison. For these reasons, I believe that the female dancer does look like a prostitute,²⁰ and that—as we shall see later on—she dances accordingly.

While we know that T1 and T2 (as well as *Birds* 661-83, see below) link the criticism of the New Music with dance performances, little is known about the stagecraft of fragmentary plays. Even so, some comic fragments confirm the association between the New Music and at least the imagery of obscene dancing. The analysis of Pherecrates fr. 155 K.-A., which is key in my argument, shall wait until the end of this paper: then, I will point out how this text displays not only sexual imagery (as it is well known), but also consistent dance terminology. For now it suffices to notice that Mousikē is probably portrayed as a prostitute,²¹ or would at least be regarded as such by the fifth-century spectators, since no respectable Athenian woman would walk on her own down the street (βαδίζουση μόνη, 24), nor would she have that many chances of encountering, alone, men who are no relatives of her, as Mousikē does. Accordingly, it would be a colleague of Cyrene who speaks, yet the sexual practices described here would be disturbing even for such an experienced woman. A further resemblance with Cyrene of the Twelve Tricks is the insistence on the number δώδεκα (5, 16, and 25), which in Greek literature often means a 'great amount'²² (a 'dozen' rather

recommended to dance Thersites instead. A similar point is also made in the epitaph of Allia Potestas (*CLE* 1988, 200 AD ca.), a freedwoman praised for her legs on the ground that they resemble that of Atalanta on the comic stage".

18 Borthwick 1994, 27.

19 See the examples recalled in Borthwick 1994, 27 n. 23.

20 Probably a cheap one, for the sketch aims at parodying the inferior quality of Euripides' songs.

21 Anderson 1994, 134; Dobrov and Urios-Aparisi 1995, 157f.; Storey 2011, 495.

22 E.g. Aristoph. *Pl.* 852 and fr. 452 K.-A. Cf. Ovid, *Ars amatoria* 786: *mille modi Veneris*.

than 'twelve') and recurs in a variety of erotic contexts,²³ indicating "the 'full monty' of sexual experiences".²⁴

As a matter of fact, plenty of comic texts, both from fully and fragmentarily preserved plays, show a link between the criticism of the New Music and the obscene dancing. For example, Barker (2004) has convincingly argued that the Nightingale in *Birds* 661-83 embodies the excesses of the New Music, and that the *kōphon prosōpon* who plays this role looks like a prostitute comparable with the female dancer in *Frogs*. Barker also points out that, though the Nightingale sings offstage early in the play (203),²⁵ she enters the stage only after ca. 500 lines (at 659); by then, the spectators are eager to see her,²⁶ and Aristophanes would hardly disappoint them by showing a homely dancer. I very much agree with Barker's thesis and would stress that the Nightingale not only looks like a prostitute, but acts like one as well; since her acting is mute yet visible,²⁷ she has to show she is a prostitute by dancing (676-83).²⁸ The reactions of the (male) internal spectators, Peisetairos and Euelpides, support this reading: they refer to the Nightingale as a cross between a bird and a young woman of striking beauty (667-74), and articulate their response to her dance in straightforward sexual terms, wishing to kiss her and to spread her legs.²⁹

As for the comic fragments relevant to our subject, two examples shall suffice. Cratinus fr. 276 K.-A. parodies Gnesippus, son of Cleomachus, by mentioning a chorus of hair-plucking women with depilated μέλη πονερά, which, as we will see with regard to μελοποιεῖν in T2, 1328, ambiguously indicate 'ugly songs' as well as 'shameful body parts'.³⁰ Needless to say, female dancers are generally regarded as prostitutes, and especially so if they are visibly depilated

23 See Beta 2007. Interestingly, in *Anth. Gr.* 5.126.3 a prostitute gets five drachms for her twelve tricks, πέντε δ' ἐγὼ δραχμάς τῶν δώδεκα Λυσισανᾶσση.

24 Beta 2007, 314; cf. Dobrov and Urios-Aparisi 1995, 155.

25 As Barker (2004) puts it, the Nightingale's song is "too many things at once. It is a νόμος, a ὕμνος, a θρήνος, an ἔλεος, a sound to be ... responded to by the lyre, the inspiration and accompaniment for choral song, and specifically for choral song characterized as ὀλουγή".

26 Cf. Barker 2004, 196, "the audience will be at the edge of their seats waiting to see how she will be visibly represented".

27 *Av.* 680, ὥφθης.

28 For evidence of dancing pipe-players see Barker 2004, 202f.

29 According to the commentators, the kiss at least is likely to be performed on stage: cf. *Av.* 673f.

30 Cratinus fr. 276 K.-A., ἴτω δὲ καὶ τραγωδίας/ὁ Κλεομάχου διδάσκαλος/ἔμετὰ τῶν παρατιλιῶν/ἔχων χορὸν Λυδιστὶ τιλ-/λουσῶν μέλη πονηρά, 'Let the son of Cleomachus go away as well, the producer of tragedy, along with his chorus of hair-plucking slave women, who pluck their ugly songs [limbs] in the Lydian mode' (tr. Storey 2011).

(e.g. Aristoph. *Ra.* 516). It is also noteworthy that Gnesippus himself is associated with musical innovations as well as with erotic subjects: while Eupolis (fr. 148 K.-A.) considered his choral songs new enough to oppose them to those of Stesichorus, Alcman, and Simonides, other comic authors allude to his erotic songs or mimes (Chionides fr. 4 K.-A.; Cratinus fr. 17 K.-A.; Teleclides fr. 36 K.-A.). The second example is Strattis fr. 71 K.-A.³¹ There is scholarly consensus that this fragment parodies the musical experiments by Euripides,³² and I think the target can be more narrowly identified with his choral dances. While the exact entomological identification of *πρασσοκουρίδες* is uncertain,³³ these certainly are caterpillar-like insects: now, the contrast between their fifty footprints (*πεντήκοντα ποδῶν ἔχνεσι*)³⁴ and the dual *ποδοῖν*³⁵ suggests that it is, in fact, dancers on two feet (i.e. Euripides' dancers?) who are here compared with the bugs. The dancers, thus, are imagined to leave caterpillar-like foot marks on the criss-crossed dancing floor. The bugs' twisting paths in Strattis remind us of the circular anthills in T1, 100, whereas both texts parody a dancing style that Old Comedy regards as typical of the New Music. In Strattis, the dance is given an obscene touch by *μακροκέρκων*,³⁶ where *κέρκος* does not mean 'tail' but *membrum virile*:³⁷ accordingly, the insects would clamp their feet onto little Satyrs with long penises.³⁸

2 Erotic Dancing Styles and Their Re-Use in Comedy

We have noticed so far how Old Comedy links the New Music with lascivious dancing, even by actually bringing prostitute-like dancers to perform on stage.

31 *πρασσοκουρίδες, αἱ καταφύλλους/ ἀνὰ κήπους πεντήκοντα ποδῶν/ ἔχνεσι βαίνειτ', ἐφαπτόμεναι/ ποδοῖν σατυριδίων μακροκέρκων, / χοροὺς ἐλίσσουσαι παρ' ὠκίμων/ πέταλα καὶ θριδακινίδων/ εὐόσμων τε σελίνων*, 'Leek bugs, who make your way through leafy gardens on tracks of fifty feet, clamping your feet onto little orchids with long stalks (or 'little satyrs with long tails'), winding your dances among the leaves of basil and lettuce and sweet-smelling celery' (tr. Storey 2011).

32 See Orth 2009, 268.

33 See Conti Bizzarro 2009, 14f.

34 The number fifty also reminds us of the dithyrambic dance. Orth (2009, 270) recalls Euripides' mentions of choruses of fifty, e.g. *IT* 427f. and *Ion*, 1081f.

35 I understand *ποδοῖν* as a *dativus instrumentalis* rather than as a *genitivus* depending on *ἐφαπτόμεναι*. See Orth 2009, 270f.

36 On which see Orth 2009, 271.

37 See LSJ s.v.; Henderson 1975, 128.

38 A comically anti-erotic effect of this treatment is maybe alluded to through the mention of the *θρίνδαξ*, 'lettuce', which was considered an anti-aphrodisiac herb (see Amphis fr. 20).

In what follows, my aim is to put the erotic dances of comedy into their dance-historical context by documenting the dance tradition underlying them.

Forms of erotic dancing are known to exist in virtually every dance culture and, in spite of the sketchy evidence of dance performance in Antiquity, erotic dances could fill quite a chapter in books on ancient Greek dance. Dances which represent (however realistically) *rendez-vous* and sexual acts of mythical and common lovers are popular throughout the Classical period and up until the Late Antique era. It is possible, though far from certain, that one such dance is described as early as the *Odyssey* (8.250-369): Athenaeus (1.15d) and several modern scholars³⁹ believe that Demodocus' song about the adultery of Ares and Aphrodite is accompanied by a dance performance.⁴⁰ If this dance reflected the contents of the song, it would also display the (comically) erotic situation in which the mythical lovers are caught *in flagranti*.

What is certain is that erotic dances were enjoyed in Aristophanes' day, as most noticeably proved by Xenophon's *Symposium* (9.4-7). The dance described here displays how Dionysus courts Ariadne and represents both his advances and her physical responses to them, in an erotic *crecendo* ranging from kisses to embraces until the lovers, as Xenophon puts it, are about to go for their bed.⁴¹ The realism of the performance had to be striking: Xenophon stresses repeatedly how this is not merely an imitation of love acts, but looks like the real thing. Accordingly, the performance elicits the sexual excitement of the symposium guests, with the unmarried men coming to wish to be married and with the married ones taking leave to immediately hasten back home and enjoy their wives. It is worth recalling that in T₁ and T₂ the internal spectators (all male) also react to the dances with (comically exaggerated) excitement and sexual fantasies. Roughly contemporary to Aristophanes is Gnesippus, a *chorodidaskalos* whom Old Comedy regards as specialized in erotic dance performances (see above on Cratinus fr. 276 K.-A.). Close to the end of the classical period, Aristoxenus (fr. 110 Wehrli) remarks on the *μαγῶδία*, a farce-like genre in which male performers would dress and act, among other things, like adulterous women.⁴²

39 E.g. recently Franklin 2013, 220; Schlapbach 2017, 13f. Finglass (2017, 68-73) reports different opinions on the issue.

40 Alcinoos summons both dancers and singer to let the performance begin, and verses 250-67 describe an intermedial song-and-dance performance, with Demodocus playing the lyre at the centre of the dancing space and the dancers performing all around him.

41 On this dance performance see Andrisano 2003, Wohl 2004, 354-60.

42 Aristox. fr. 110 Wehrli (*ap.* Athen. 14.621c-d), ὁ δὲ μαγῶδός καλούμενος τύμπανα ἔχει καὶ κύμβαλα καὶ πάντα τὰ περὶ αὐτὸν ἐνδύματα γυναικεῖα· σχινίζεται τε καὶ πάντα ποιεῖ τὰ ἔξω κόσμου, ὑποκρινόμενος ποτὲ μὲν γυναικας καὶ μοιχοὺς καὶ μαστροποὺς, ποτὲ δὲ ἄνδρα μεθύοντα

Post-classical evidence about erotic dancing is legion, referring to pantomime, mime, and other genres. While pantomime, the would-be heir of tragedy, brings mythical lovers on stage, mime opts for plots involving adultery and bedroom farces of common men and women.⁴³ Such a choice of subjects certainly helps us to understand why Christian authors (most noticeably John Chrysostom) would condemn dancing shows for the *libido* they act out.⁴⁴ Two examples suffice here, one from the highbrow and the other from the lowbrow side of erotic dance entertainment. Lucian (*De salt.* 63) tells of a brilliant pantomime performing (again?) the story of Ares and Aphrodite as they are caught *in flagranti* committing adultery (μοιχεία), whereby the adultery had to be danced, however platonically, if the story were to be recognizable for the audience.⁴⁵ On the lowbrow side, an epigram from the *Greek Anthology* (5.129) praises an Asiatic ὀρχηστρίς for dancing in a plainly obscene fashion.⁴⁶

καὶ ἐπὶ κῶμον παραγινόμενον πρὸς τὴν ἐρωμένην. φεσὶ δὲ ὁ Ἀριστόξενος τὴν μὲν ἱλαρῶδιαν σεμνὴν οὔσαν. παρὰ τραγωδίαν εἶναι, τὴν δὲ μαγῶδιαν παρὰ τὴν κωμωδίαν, 'The so-called *magōidoi* have drums and cymbals, and wear only female clothing; they *schinízomai* and behave in all the ways no one should, sometimes pretending to be women who are having affairs or arranging liaisons for others, at other times playing a man who is drunk or who appears at his girlfriend's house with a group of troublemakers. Aristoxenus claims that because *hilarōidia* is respectable, it is connected with tragedy, whereas *magōidia* is connected with comedy' (tr. Olson, in Austin and Olson 2004).

43 E.g. Luc. *De salt.* 59; *Anth. Gr.* 5.129; Mart. *Ep.* 5.78.27-8, 6.7.1.1; Juv. *Sat.* 6.314-45. According to *Hist. Aug., Heliogab.* 25.4-5, emperor Heliogabalus had the sex acts not imitated, but actually performed in front of him. For erotic pantomimes see e.g. Hall 2008, 3f.; Ingleheart 2008, 199 on Ovid's poems; for erotic mimes see Webb 2008, 105-12 (on female performers see Webb 2002); Hörschele 2013. Cf. also Teleclides fr. 36 K.-A. on Gnesippus, who is believed to have composed erotic mimes.

44 Cf. Webb 2008. Erotic dances are also attested in Latin literature: see e.g. Apuleius, *Metamorphoses (The Golden Ass)* 10.31; Ovid, *Remedies for Love* 755 (*Illic adsidue ficti saltantur amantes*).

45 ... αὐτὸς ἐφ' ἑαυτοῦ ὀρχήσατο τὴν Ἀφροδίτης καὶ Ἄρεος μοιχείαν, "Ἥλιον μνηύοντα καὶ Ἥφαιστον ἐπιβουλεύοντα καὶ τοῖς δεσμοῖς ἀμφοτέροισι, τὴν τε Ἀφροδίτην καὶ τὸν Ἄρη, σαγηνεύοντα, καὶ τοὺς ἐφεστῶτας θεοὺς ἕκαστον αὐτῶν, καὶ αἰδουμένην μὲν τὴν Ἀφροδίτην, ὑποδεδοικότα δὲ καὶ ἱκετεύοντα τὸν Ἄρη, καὶ ὅσα τῇ ἱστορίᾳ ταύτῃ πρόσσεστιν, '... he danced the amours of Aphrodite and Ares, Helios tattling, Hephaestus laying his plot and trapping both of them with his entangling bonds, the gods who came in on them, portrayed individually, Aphrodite ashamed, Ares seeking cover and begging for mercy, and everything that belongs to this story' (tr. Harmon 1936).

46 *Anth. Gr.* 5.129 (Automedon), τὴν ἀπὸ τῆς Ἀσίας ὀρχηστρίδα, τὴν κακοτέχνους/σχήμασιν ἐξ ἀπαλῶν κινουμένην ὀνύχων, αἰνέω, οὐχ ὅτι πάντα παθαίνεται, οὐδ' ὅτι βάλλει/τάς ἀπαλὰς ἀπαλῶς ὥδε καὶ ὥδε χέρας/ἀλλ' ὅτι καὶ τρίβακον περὶ πάσσαλον ὀρχήσασθαι/οἶδε, καὶ οὐ φεύγει γηραλέας ῥυτίδας./ἡλωττίζει, κνίζει, περιλαμβάνει· ἦν δ' ἐπιρίψη/τὸ σκέλος, ἐξ ἔθου τὴν κορύνην ἀνάγει, 'The dancing-girl from Asia who executes those lascivious postures, quivering from her tender finger-tips, I praise not because she can express all variations of

This cursory dance-historical excursus documents that a tradition of erotic dancing was popular at least from the Classical period. A corresponding dance vocabulary, thus, has to be well-known to the audience and choreographers of the fourth century BC, and it is easy to imagine how Old Comedy, when making half-naked dancing girls perform, would allude to it through hilarious exaggerations and misrepresentations.⁴⁷ We know for a fact that Aristophanes presented danced renderings of sexual practices on stage: in *Thesmophoriazusae* 1173-96 a prostitute dancer, following Euripides' instructions, performed figures of lovemaking on a delighted male character while sitting half-naked and barefoot on his knees, in some sort of lap dance *ante litteram*.⁴⁸ This term of comparison should shed light on the dance performances we are about to consider.

3 Figures of Lovemaking, Figures of Dance: A Semantic Analysis

The final task of this paper is to document at a semantic level the consistent overlapping of dance and sex in T₁, T₂, and T₃, which all parody the New Music. The following analysis tries to show that crossovers between the semantic field of sex and dance are strangely frequent in these texts, and that they brand the dance-related innovations of the New Music as indecent.

I am going to propose that the sexual imagery of T₁ and T₂ comments on the dances performed by Agathon and by the Euripidean Muse, which would thus be described as reminiscent of erotic practices. How realistically or how comically dance represented sex acts cannot be ascertained and actually is for present purposes irrelevant: what matters is that Comedy would parody the New Music with dance performances that are obscene, cheap, and fit for prostitutes. Both dancers are compared with Cyrene, a Libyan prostitute who, according to the *scholia*, was famous across the Mediterranean Sea for her

passion, or because she moves her pliant arms so softly this way and that, *sed quod et pannosum super clavum saltare novit et non fugit seniles rugas. Lingua basiatur, vellicat, amplectitur; si vero femur superponat clavum vel ex orco reducit* (tr. Paton 1916).

47 Vetta (2007) remarks, maybe provocatively, that "a genre of comic lyrics does not exist in itself, but only references and funny variations" inspired by other musical traditions (see also Rocconi 2007): this probably applies to comic dance as well, which consists to a great extent of parodying allusions to other dance traditions.

48 What fantasies the audience could not cherish by seeing the ridiculously erotic dance of Agathon are compensated now, toward the end of the play.

σχήματα συνουσίας, 'figures of lovemaking',⁴⁹ and a close reading will reveal a number of further references to the subject.

The language of T1 is too paratragically sublime to allow for sexual innuendos, but the dance performed during these lines had to make up for their flaunted chastity. Figures of lovemaking, especially passive sexual practices considered typical of women, are just what Inlaw expects from start to finish from Agathon—in fact, he mentions lots of them.⁵⁰ This has usually been understood as part of the mockery against the effeminate Agathon. However, there is reason to think that the insistence on figures of lovemaking also reflects the erotic character of Agathon's dance. Shortly after performing, Agathon himself formulates the artistic principle that justifies the effeminacy he has just displayed: he holds that a playwright must adopt the personality and the *bearing* (148, φορῶ) of his own characters to imitate them convincingly, and specifies that if someone writes plays about women 'his body must participate to their habits' (μετουσίαν δεῖ τῶν τρόπων τὸ σῶμ' ἔχειν);⁵¹ here, the terms referring to the actor's bearing, body, and behavior point to dance as a chief medium of imitation. Yet, while in Agathon's intentions the imitated women are the pious priestess and maidens, to the eyes of the spectators it is rather Cyrene,⁵² who, following Agathon's artistic principle, would be imitated by means of obscene body movements and bearing. As recalled above (cf. Aristoxenus fr. 110 Wehrli), transvestite men dancing as lascivious women were popular in the Classical period, and Agathon's transgender, meretricious dancing appears to meet the basic requirements of the genre.

49 On the ancient σχήματα συνουσίας see Borthwick 1968, 68 and 1994, 37; Beta 2007. The title of what can be regarded as the Kama Sutra of the Greek world—a work by Paxamus from the first century BC—was *περὶ αἰσχυρῶν σχημάτων*.

50 Before Agathon enters the stage, Inlaw suspects that he is currently undergoing a series of sexual practices which are considered typical of women (50, μὴν βινεῖσθαι, 57, καὶ λαικάζει), and which culminate with the imaginary rape carried out by Inlaw himself at Agathon's expense (59-62), and after the song and dance performance he refers to the poet's anal submissions (158 and 201), and again, when Agathon reveals that the women of the chorus are afraid he might rob them of the 'nocturnal practices and female Cypris' (205f., ἔργα νυκτερείσια, θήλειαν Κύπριν), Inlaw paraphrases this with another sexual practice to which Agathon would undergo, βινεῖσθαι (206).

51 Tr. Sommerstein 1994. Pretagostini (1997, 120) sees here anticipated an important point of Aristotle's *Poetics*; Schwinge (2014) interprets Agathon's poetics as *Mensch-Stil-Prinzip*.

52 This might very well include the mimicry of an effeminate voice: cf. Vetta 1993; Csapo 2002, 137; Prauscello (2006, 179f.), who quotes further literature on this subject. For female impersonation in late antique pantomime see Webb 2008, 77-9.

The suspicion that Agathon has just played female role(s) by dancing something resembling figures of lovemaking—or a comically revisited version of them—is confirmed shortly after the performance. In applying Agathon's artistic principle to further subjects, Inlaw infers that Agathon would stage certain characters with the correspondent σχήματα συνουσίας: for example, he would play Phaedra by performing the rider position (153, 'Then you make love horse-fashion when you are composing a Phaedra?'),⁵³ the Satyrs by having anal intercourse (156f., 'When you stage Satyrs, call me: I will help you from behind once I get hard').

Admitting that Agathon's dance is spiced up with feminine σχήματα συνουσίας also sheds new light on Inlaw's curious sexual response to the show. In fact, under the spell of the effeminate performance and reflecting what Agathon shows, Inlaw temporarily switches into a female and sexually passive identity. He invokes the Genetyllides, the women's goddesses that "are routinely associated with feminine sexual wantonness",⁵⁴ and comes to long for sexual practices which the Greeks regard as feminine-passive:⁵⁵ such as french-kissing (131f., κατεγλωττισμένον καὶ μανδαλωτόν),⁵⁶ the passive character thereof is accentuated by the passive participle (cf. also βινεῖσθαι at 206), and the undergoing of anal intercourse (133, ὑπὸ τὴν ἔδραν αὐτὴν ὑπὴλθε γάργαλος).

T2 is disseminated with mentions of σχήματα συνουσίας. Dionysus introduces the song-and dance performance of the Euripidean Muse with the controversial line αὕτη ποθ' ἡ Μοῦσ' οὐκ ἐλεσβιάζειν, οὐ (1308). The scholiasts read this as an emphatic question ('Didn't she λεσβιάζειν? Didn't she?'), but several recent editors opt for a statement in which the repeated negation (οὐκ

53 The erotic figure of riding once again qualifies Euripides' Phaedra and Agathon as prostitutes, since it requires the woman to be the active one in lovemaking and was therefore considered as a prerogative of sexually uninhibited women. See Pretagostini (1997, 120f.) on κελητίζειν: "una figura sessuale che, se nel rapporto sessuale tra uomo e donna presuppone un ruolo attivo di quest'ultima, perché le permette di 'cavalcare' l'uomo stando seduta sopra di lui, nel rapporto omosessuale maschile consente al partner che 'monta a cavallo' di essere sodomizzato. Proprio perché questa figura nel rapporto eterosessuale presuppone una notevole intraprendenza da parte della donna, nelle fonti letterarie è considerato prerogativa o di donne molto disinibite o di prostitute". Pretagostini corroborates this view with references to Aristophanes (nn. 13 and 14) and with iconographic evidence.

54 Austin-Olson 2004, *ad loc.*

55 Agathon's performance, thus, "like Agathon himself (esp. 35, 57, 153) takes the passive role" (Austin-Olson 2004, *ad loc.*).

56 Comedy routinely presents french-kissing as lascivious, e.g. as later in this very play at 1192. See also *Anth. Gr.* 5.129, mentioned above.

ἐλεσβιάζεν, οὐ) would deny most firmly that the Muse has ever done whatever λεσβιάζειν means.⁵⁷ The opposition between the past and the present behaviour of the Muse is striking: if Dionysus stresses vehemently that ‘once’ the Muse οὐκ ἐλεσβιάζεν, we have to infer that this is exactly what she is doing now. As for λεσβιάζειν, the versatility of the Lesbian women is proverbial and the verb indicates beyond doubt the accomplishment of a σχῆμα συνουσίας,⁵⁸ which is here said to be performed by the dancer. It is perfectly plausible that here, as I have suggested for T1, the point of attack of the dance (and, possibly, of the instrumental music) comes shortly before that of the singing voice, which starts in the next line; also, since the Muse plays her own *ostraka*, she can begin dancing to her own rhythm as soon as required. If λεσβιάζειν does remark on the Muse’s dancing, then her figures of dance would remind Dionysus—and the theatre audience—of erotic practices in which Lesbian women allegedly excelled. Incidentally, ancient sources usually describe dances by women with *ostraka* or *krotala* as lascivious.⁵⁹

Coming to the lyrics (1309–22), while we know that these puzzling lines parody Euripides’ choral performances, the exact target of their parody escapes us.⁶⁰ I think that admitting allusions to the dance accompanying these lines may help us to understand them better: in fact, *heilissō* is often used by Euripides to indicate dance movements, and the animals’ movements described at 1309–22 provide an apt image for dance. Intriguingly, a close reading of these lyrics reveals sexual innuendos that would suit well the dance of the Lesbian, meretricious Muse. The rams at which the dolphin is said to leap are a notorious image of penetration (ἔμβολος, cf. 1318, κυανεμβόλοις),⁶¹ and the image of the spiders also deserves to be considered (1313f.). Spiders have, strictly speaking, no fingers but tiny legs whose articulation in phalanges resembles that of

57 E.g. Del Corno 2006⁶ (1985); Dover 1993; Sommerstein 1996. For scholarly positions on 1308 see De Simone 2008.

58 Maybe the *fellatio*: see Dover 1993 *ad loc.*; Borthwick 1994, 28; Prauscello 2004, 337. See *Schol. ad loc.* (Chantry 2001, 218): λεσβιάζειν ἐστὶ τὸ αἰσχροῦ ποιεῖν. Διαβάλλονται γὰρ οἱ Λέσβιοι ὡς αἰσχροὶ καὶ ἄθεσμα πράττοντες. Λέγει δὲ ἐντεῦθεν ὡς Εὐριπίδης αἰσχροὶ καὶ ἄθεσμα εἰσῆγεν εἰς τὴν αὐτοῦ ποίησιν. Cf. Pherecr. fr. 159 K.-A.

59 E.g. Hdt. 2.60 speaks of Egyptian women who use the κρόταλα while dancing in a lascivious way; Juvenal, *Sat.* 11.162–8 describes how dancing girls from Cadiz perform with rattling potsherds, *testarum crepitus* (see Fear 1991); *Pap. Cornell* 9 (206 AD) calls two castanet dancers ἐτέραι (see Westermann 1924). Iconographic evidence about such performers is listed by Webb (2002, 286 n. 13). Lawler (1940) relates dances performed with wooden percussions (πινακίδες) to orgiastic rituals. On percussion instruments see West 1992, 122–8.

60 LeVen (2014, 150–88) analyses the complex *lexis* of the New Music, which is mocked by Aristophanes.

61 Henderson 1975, 120f.

fingers. This is, thus, a transparent metaphor for spider feet, yet Aristophanes says these 'feet' to *heieieieieieilissein*: this seems to be a quite literal paraphrase of ειλίπους, 'bringing round the feet', a widely attested adjective describing women having sex.⁶² It shall remain (im)purely hypothetical that these may be reflections of the Muse's erotic dance: nevertheless, it is exactly in paratragically sublime contexts like this that Comedy resorts to the vaguest euphemisms to indicate sexual practices,⁶³ and Aristophanes' choice of words does allow for such thoughts.⁶⁴ Of course, dance performance would make any slight verbal inking explicit enough.

Be that as it may, by the end of the lyric the dancer has, reportedly, flung her arms around one of the male characters (either Euripides or Dionysus, 1322): women's embracing was seen as an open sexual approach, which here crowns a thoroughly licentious dance.⁶⁵ By the way, the embrace between the Muse and the male character, which parodies that between Hypsipyle and her son in Euripides' lost tragedy,⁶⁶ confirms that Aristophanes' paratragedy operates through different media: notoriously, language and music, but also dance.

Further hints of the dancing of σχήματα συνουσίας are in the lines that comment on the Muse's song and dance immediately after her performance is over. Scholars agree that the feet mentioned at 1323f. remark not only on metrical irregularities,⁶⁷ but also on stage performance:⁶⁸ while little in this regard

62 See LSJ s.v. and Henderson 1975, 173.

63 Henderson 1975, 113-17, 133f., 154-61.

64 Incidentally, while the mention of halcyons and dolphins might well parody purely musical aspects of Euripides' art, this is not the case of the spiders, whose parody of choral performances can only be accounted for by supposing a hint at dance.

65 For female embraces in obscene dancing see e.g. *Anth. Gr.* 5.129, quoted above; on περιβάλλω in Euripides see Bond 1963, 138.

66 The allusions to the *Hypsipyle* are carefully discussed by Borthwick (1994, 29-33).

67 At 1322, a glyconic verse, the initial two-syllable 'aeolic base' is abnormally replaced by the anapaestic foot of περιβάλλ'. The metrical irregularity referred to by the second 'foot' is more uncertain. According to Dover (1993, *ad loc.*), "ὁρῶ in 1323 creates an abnormality in a run of glyconics"; cf. Sommerstein 1994, *ad loc.*, according to whom the issue would be that at 1323 the glyconic ends with — ∪ ∪ — (τοῦτον; ὁρῶ) instead of the expected — ∪ —. However, Borthwick (1994, 34) has questioned that the two lines are metrically irregular and, more importantly, one might wonder how far the audience would notice and laugh at such slight inconsistencies.

68 Some scholars suppose that Aeschylus at this point kicks either Dionysus (the MSS attribute the response ὁρῶ to Dionysus, and some scholars do not see any reason for emending them: e.g. Dover 1993) or—following an emendation of the MSS—Euripides (e.g. Radermacher 1954²; Borthwick 1994, 34; Del Corno 2006⁶ [1985]). Instead, Borthwick suggests that the first foot indicates one foot of the dancer, the second one of Euripides, and this sketch would allude to Euripides' criticism, in *Electra*, of the recognition scene in Aeschylus' *Chorephori*, where Electra compares her brother's footprints around the tomb

can be positively ascertained, I think that the feet belong not to Aeschylus, but to the dancer, and that they may play a role in her erotic dancing (e.g. in *Thesmophoriazusae* 1173-96 the prostitute outstretches her feet while sitting on the Scythian's knees, and in *Greek Anthology* 5.129 the dancer raises a leg), because it is immediately after these foot movements that the dancer is compared to Cyrene (1325-8, cf. Agathon in T1, 99).

As to this comparison with a most skilled prostitute, both *μελοποιεῖν* and *δωδεκαμήχανος* point to a dance resembling sex performances. In *μελοποιεῖν*—just like *μέλη πονηρά* in Cratinus fr. 276 K.-A.—*μέλη* designate both 'songs' and '(genital) body parts'; this suggests that the dancer has just manoeuvred certain parts of her body in such a fashion as to resemble a prostitute at work. Concerning *δωδεκαμήχανος*, a *scholium veterum*⁶⁹ and Hesychius⁷⁰ explain it by saying that Cyrene performed 'just as many (τοσαῦτα) σχήματα συνουσίας', whereas the erotic implications of the number twelve have already been noted (see above, T3). There is also reason to suspect that *δωδεκαμήχανος* alludes to the dance just performed, since two authors contemporary with Aristophanes use this unusual adjective with reference to dance. Firstly and most importantly, in Euripides' *Hypsipyle* fr. 755 (ἀνὰ τὸ δωδεκαμήχανον ἄστρον), of which 1327 is a paratragic echo, *δωδεκαμήχανος* refers to the sun going through the twelve constellations of the zodiac. The imagery of dancing stars recurs throughout Greek poetry from Alcman's first *parthenion* onwards and is especially frequent in Euripides.⁷¹ This suggests quite strongly that Euripides' fragment refers to the 'dance' of the sun—that is, its movements and changing positions through the zodiac—and it is this very use of *δωδεκαμήχανος* that Aristophanes echoes at 1327. The second piece of evidence is Plato Comicus fr. 143 K.-A. (Ξενοκλῆς ὁ δωδεκαμήχανος ὁ Καρκίνου παῖς τοῦ θαλαττίου), where *δωδεκαμήχανος* describes Xenocles, a notoriously ridiculous dancer who is lampooned for his art also by Aristophanes himself.⁷² On the basis of such uses of *δωδεκαμήχανος*, I suggest that this unusual adjective, in T2, comments on the dance that the Euripidean Muse has just staged, meaning that it displayed the full repertoire of 'figures'.⁷³

with her own (Eur. *El.* 534-7); whereas I got the feeling that Borthwick here replaces a complicated interpretation with an even more complicated one.

69 Chantry 1999, 149, *Κυρήνη... δωδεκαμήχανος ἐπικαλουμένη διὰ τὸ τοσαῦτα σχήματα ἐν τῇ συνουσίᾳ ποιεῖν*.

70 δ.2706, *δωδεκαμήχανος· πόρνη τις ἐλέγετο, διὰ τὸ τοσαῦτα σχήματα ποιεῖν συνουσίας*.

71 See Csapo 2008. This imagery is so well established that *ἀστράων σχήμα* simply means 'constellation'.

72 This happens in *Pax* 781-95 and 864, and most noticeably in the dance farce at the end of *Wasps*. See Borthwick 1994, 37.

73 See Borthwick 1994, 37, "the main point turns on the licentious posturings indulged in by the 'Muse' during her dance".

Once again, it is hard to tell whether these figures are of dance, of lovemaking, or both.

Unlike T₁ and T₂, T₃ is in spoken lines and does not show any dance performance, but a speech by the personified Mousikē, who is the victim of sexual abuses from the composers of the New Music. I am going to argue that, in Mousikē's speech, the notorious sexual innuendos refer not only—as usually assumed—to music,⁷⁴ but also to dance, so that discourses of sex and of dance become strangely alike. As a reminder of how this character embodies dance not less than music and of how, as we have seen above, she is probably portrayed as a prostitute, I am going to translate Mousikē as Mistress-Music-and-Dance.

The ambiguity between σχήματα ὀρχηστικά and σχήματα συνουσίας permeates the whole speech by Mistress-Music-and-Dance: the sexual abuses she has endured consist of wrongful *bending and turning*; what her body has been forced into are unnatural *movements and positions*. The description of the sexual assaults resorts almost obsessively to καμπαί/κάμπτειν 'bending', στροφαί/στρέφειν 'turning', and to other related words (e.g. στρόβιλος, ἐκτράπελος). Both κάμπτω and στρέφω have a sexual meaning in Comedy, as documented by Henderson;⁷⁵ a term of comparison may be *Plutus* 152, where prostitutes are said to 'turn' (τρέπειν) their bottom toward rich clients. While bending and turning here indicate figures of lovemaking, they are also most apt to refer to dance, and their dance-related technical meaning is indeed well established: καμπή/κάμπτειν can indicate bending as a dance movement,⁷⁶ and στροφή/ἀντιστροφή/στρέφειν indicate on the one hand a specific dance movement,⁷⁷ and on the other hand—at least according to many later sources⁷⁸—the turning to the left and to the right of the chorus during choral lyrics with repetitive structure.

It is striking that the turns and bends performed by the representatives of the New Music on Mistress-Music-and-Dance perfectly match with the exaggerated gyrations which Old Comedy (as noticed above) would criticise as typical of the New Music dancing style. This makes a lot of sense, because

74 E.g. Restani 1983; Zimmermann 1993, 40-5; Anderson 1994, 127-34; Dobrov and Urios-Aparisi 1995; Pöhlmann 2011.

75 Henderson 1975, 175f., 180.

76 E.g. Xenoph. *Symp.* 2.22.

77 E.g. Lib. *Or.* 64.117.

78 See Mullen 1982, 225-30 (*Appendix*).

Pherecrates here is criticising composers who are also choreographers, and pioneers for innovations in the field of music as well as of dance.⁷⁹

Further allusions to the whirls and circles that accompany the New Music are Phrynes' στρόβιλος, Timotheus' anthills, and possibly Cinesias' shields. The enigmatic image of Cinesias' shields has occasionally been associated with dance movements (10-12, '... in the creation of [Cinesias'] dithyrambs, like in the shields, what is at his right appears to be left'⁸⁰). Since iconographic and literary evidence indicate that the shields commonly used as props in weapon dances are round and painted,⁸¹ I would not rule out the possibility that Pherecrates is saying Cinesias has the dancers rotating the shields so that the emblems painted on them (ἐν ταῖς ἀσπίσιν) appear to switch positions (ἀριστέρ' αὐτοῦ φαίνεται τὰ δεξιὰ). As for the anthills of Timotheus (23), their twisting structure has already been considered in regard to T1, 99, the point being – there, as it is here—that the anthills represent the winding tracks of the New Music in both melody *and* dance. Finally, Phrynes is said to sodomise poor Mistress-Music-and-Dance with his own (ἴδιον) στρόβιλος, which he misuses as a sex toy by thrusting (ἐμβάλῳ), bending (κάμπτων), and turning it (στρέφω) so badly as to almost kill her (14-18). While the exact shape and use of the musical tool called στρόβιλος are controversial, it is generally assumed that this was a wooden peg used as a turnable device to tune stringed instruments.⁸² As to the overlapping of σχήματα συνουσίας and σχήματα ὀρχηστικά, it is remarkable that the term στρόβιλος, which derives (again) from στρέφω, also designates a homonymous dance figure. In fact, Borthwick thinks that στρόβιλος “referred to an innovation in the dithyrambic ἀγωγή, melodic, rhythmic and orchestric, and to an irregular rotatory motion, reflected in the text and music as well as the dance, which disturbed the prevailing pattern of the κύκλιος χορός with a violent whirling”.⁸³ What is certain is that Aristophanes associates στρόβιλοι with Carcinus (*Pax* 864, τῶν Καρκίνου στροβίλων), who like the aforementioned

79 As far as Old Comedy and Attic tragedy from the Classical age are concerned, we might presume that the playwrights are also in charge of the composition of the music and of the choreographies (cf. e.g. Taplin 1977, 13, “all, so far as we know, composed the music of their lyrics, devised the accompanying choreography, and supervised the production in general. This would include the over-all direction of delivery, gesture, grouping, movement, etc.”). This is also the case for dithyrambs; e.g. for Cinesias as personally instructing his choruses in dancing see Aristoph. *Av.* 1403-6.

80 Following Borthwick (1968), movements of the shield to right and left would indicate actions of offence and defence.

81 See Poursat (1968) and Ceccarelli (1997) on the iconographic evidence.

82 Pöhlmann 2011, 126-30.

83 Borthwick 1968, 68.

Xenocles is lampooned in Comedy as a ridiculous dancer, as displayed most hilariously by the dancing farce at the end of *Wasps*.⁸⁴

Following my reading of T1, T2, and T3, many of the sexual practices alluded to in these texts work as powerful metaphors for an innovative dancing style, a dancing style that Old Comedy stereotypes as typical of the New Music and brands as immoral, licentious, and cheap.

Conclusions

Overt and covert renderings of sexual activities are disseminated throughout the history of ancient and modern dance, dating from the love dance between Dionysus and Ariadne described by Xenophon to Vaslav Nijinsky's *L'Après-midi d'un faune* (1912) and beyond.

It is with good reason that today's anthropology of dance does not distinguish strictly between 'dance' and other codified patterns of bodily movement requiring specific training and regarded as 'artistic': the boundaries between dance and performance arts such as shamanic rituals, processional performances, and martial arts are indeed very fuzzy.⁸⁵ Erotic practices might be added to the list as well, since figures of (professional) lovemaking and figures of dancing have much in common: both are *patterns of bodily movement* which, to be enjoyable, require rhythmical performance, professional training, bodily skills, and, preferably, an attractive performer to carry them out. The Greeks seem to be aware of these analogies, for they qualify both dance and professional lovemaking as 'arts' (τέχναι), and also call the respective figures the same thing, σχήματα. Even today, a number of dance genres and practices (e.g. lap dance) exemplify that there is no fundamental incompatibility between dance and eroticism, and that the σχήματα taught and performed in the two different τέχναι can be effectively transferred, as exemplified by *Thesmophoriazusae* 1173-96 and, according to my hypothesis, by T1, T2, and T3 as well.

84 Of course, not all of the sexual allusions in T3 can be connected with dancing σχήματα. Examples of this are the mention of five strings and twelve *harmoniai* (16), which is "a current joke about σχήματα συνουσίας" (Borthwick 1968, 69; cf. also Beta 2007), and a likely word-play on χορδή, which occurs in Aristophanes as meaning apparently 'sausage' and whose synonymous νεῦρον is often attested as *membrum virile* (Borthwick 1968, 69 n. 4; Pöhlmann 2011, 124; cf. Aristoph. *Ach.* 1118-21). Alfred Dunshirn makes me notice that a similar wordplay works also for lat. *fides*, which means 'string' as well as (in comedy) 'penis' (see Woytek 1982, 232).

85 See e.g. Kaeppler (2000), with further bibliographical references.

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Appendix

T1. Aristoph. *Thesm.* 95-206 (ed.

Sommerstein)

95-133 Εὐ. σίγα. Κη. τί ἐστίν; Εὐ. Ἀγάθων ἐξέρχεται.

Κη. καὶ ποῦ < 'σθ'; Εὐ. ὅπου > 'στίν; οὗτος, οὐκκυκλούμενος.

Κη. ἀλλ' ἦ τυφλὸς μέν εἰμ'; ἐγὼ γὰρ οὐχ ὁρῶ ἄνδρ' οὐδέν' ἐνθάδ' ὄντα, Κυρήνην δ' ὁρῶ.

Εὐ. σίγα· μελωδεῖν αὐτὸν παρασκευάζεται.

100 Κη. Μύρμηκος ἀτραπούς, ἢ τί διαμινυρίζεται;

Ἀγ. ἱερὰν χθονίαν δεξάμενα λαμπάδα, κούραι, ξὺν ἑλευθερίᾳ πατρίδι χορεύσασθε βοᾶ.

95-133 Eu. Keep quiet! Inlaw: What's the matter? Eu. Agathon's coming out.

In. What, where is he? Eu. Where is he? There he is—the man who's being wheeled out now.

In. What, am I blind or something? I don't see any man here at all; what I see is Madam Cyrene!

Eu. Quiet now, he's getting ready to sing a lyric.

In. What is that tune he's warbling his way through? "Anthill Passages" or what?

Ag. Take up, maidens, the holy torch of the Two Nether Goddesses, and in the hour of

– τίνι δαιμόνων ὁ κῶμος;
 105 λέγε νυν· εὐπέιστως δὲ τοῦμόν
 δαίμονας ἔχει σεβίσαι.
 – ἄγε νυν, ὀλβίζε μουσα
 χρυσέων ρύτορα τόξων
 Φοῖβον, ὃς ἰδρύσατο χώρας
 110 γύαλα Σιμουντίδι γὰρ [...]
 130 Κη. ὡς ἦδὺ τὸ μέλος, ὦ πότνια Γενετυλλίδες,

καὶ θηλυδριῶδες καὶ κατεγλωττισμένον
 καὶ μανδαλωτόν, ὥστ' ἐμοῦ γ' ἀκρωμένου
 ὑπὸ τὴν ἔδραν αὐτὴν ὑπῆλθε γάργαλος [...]

148-58 Ἀγ.... ἐγὼ δὲ τὴν ἐσθήθ' ἅμα τῇ γνώμῃ
 φορῶ.
 χρὴ γάρ ποιητὴν ἄνδρα πρὸς τὰ δράματα
 150 ἃ δεῖ ποιεῖν, πρὸς ταῦτα τοὺς τρόπους ἔχειν.
 αὐτίκα γυναικεῖ' ἦν ποιῇ τις δράματα,
 μετουσίαν δεῖ τῶν τρόπων τὸ σῶμ' ἔχειν.
 Κη. οὐκοῦν κελητίξεις, ὅταν Φαίδραν ποιῇς;

Ἀγ. ἀνδρεῖα δ' ἦν ποιῇ τις, ἐν τῷ σώματι
 155 ἔνεσθ' ὑπάρχον τοῦθ'· ἃ δ' οὐ κεκτήμεθα,
 μίμησις ἥδη ταῦτα συνθηρεῖται.

Κη. ὅταν σατύρους τοῖνυν ποιῇς, καλεῖν ἐμέ,
 ἵνα συμποιῶ σοῦπισθεν ἐστυκῶς ἐγὼ [...]

200-6 Κη. καὶ μὴν σύ γ', ὦ κατὰ τυγον,
 εὐρύπρωκτος εἶ
 οὐ τοῖς λόγοισιν, ἀλλὰ τοῖς παθήμασιν [...]
 203 Ἀγ. κάκιον ἀπολοῖμην ἂν ἦ σύ. Εὐ. πῶς; Ἀγ.
 ὅπως;
 δοκῶν γυναικῶν ἔργα νυκτερεῖσια
 205 κλέπτειν ὑφαρπάζειν τε θήλειαν Κύπριν.

Κη. ἰδοὺ γε κλέπτειν· νῆ Δία βινεῖσθαι μὲν οὖν.

freedom dance with the loud songs of your fathers.

– (as Chorus) To which of the gods shall my festive song be? Tell me, pray. My heart is eager to obey you and render worship to the gods.
 – (as Priestess) Come now, felicitate in song him who draws the golden bow, Phoebus, who established the precinct of our city in the land of the Simois ...

In. Holy Genetyllides, how delightful that song was! How feminacious, how fully tongued, how frenchkissy! Why, as I listened to it I felt a tickle stealing right up my backside!

148-58 Ag. I change my clothing according as I change my mentality. A man who is a poet must adopt habits that match the plays he's committed to composing. For example, if one is writing plays about women, one's body must participate in their habits.

In. So when you write a *Phaedra*, you mount astride?

Ag. If you are writing about men, your body has what it takes already; but when it's a question of something we don't possess, then it must be captured by imitation.

In. Ask me over, when you're writing a satyr-play, so I can collaborate with you, long and hard, from the rear ...

200-6 In. Just as you, you young faggot, got your dilated arsehole not by words but with willing submission ...

Ag. I'd be even worse torn apart than you. Eu. How come? Ag. How come?

Because they think I steal women's *knock* turnal business, and rob them of the female's natural rights.

In. "Steal" indeed! Get fucked, that's what you mean! (tr. Sommerstein)

T2. Aristoph. *Frogs*, 1301-28 (ed.

Sommerstein)

Αἰ. οὗτος δ' ἀπὸ πάντων μέλι φέρει, πορνωδιῶν,
 σκολίων Μελήτου, Καρικῶν αὐλημάτων,
 θρήνων, χορειῶν. τάχα δὲ δηλωθήσεται.
 ἐνεγκάτω τις τὸ λύριον. καίτοι τί δει
 1305 λύρας ἐπὶ τοῦτο; τοῦ 'στιν ἢ τοῖς ὁστράχοις
 αὕτη κροτούσα; δεῦρο, Μοῦσ' Εὐριπίδου,
 πρὸς ἣν περ ἐπιτήδεια ταῦτ' ἄδειν μέλη.

Δι. αὕτη ποθ' ἢ Μοῦσ'... οὐκ ἐλεσβιάζεν, οὔ.

Αἰ. ἀλκυόνες, αἶ παρ' ἀνέμοις θαλάσ-

1310 σης κύμασι στωμύλλετε,

τέγγουσαι νοτίοις πτερῶν

ῥάνισι χροά δροσιζόμεναι,

αἶ θ' ὑπωρόφιοι κατὰ γωνίας

εἰσειεῖειλίσσετε δακτύλοις φάλαγγες

1315 ἰστότονα πηνίσματα,

κερκίδος ἀοιδοῦ μελέτας,

ἴν' ὁ φίλαυλος ἔπαλλε δελ—

φίς πρῶραις κυανεμβόλοις

μαντεία καὶ σταδίου,

1320 οἰνάνθας γάνος ἀμπέλου,

βότρυος ἔλικα παυσίπνονον—

περίβαλλ', ὦ τέκνον, ὠλένας.

ὀρᾷς τὸν πόδα τοῦτον; Δι. ὀρῶ.

Αἰ. τί δαί; τοῦτον ὀρᾷς; Δι. ὀρῶ.

1325 Αἰ. τοιαυτὶ μέντοι σὺ ποιῶν

τολμᾷς τὰμὰ μέλη ψέγειν,

ἀνὰ τὸ δωδεκαμήχανον

Κυρήνης μελοποιῶν;

Aes. But this fellow collects his honey from
 any old source—prostitutes' songs, drinking-
 songs by Meletus, pipe-tunes and dirges and
 dances from Caria. I'll very soon make it plain.

Bring me my lyre, someone—but on second
 thoughts, who needs a lyre for this job?

Where's that girl who plays percussions with
 broken bits of pot? Come here, Muse of
 Euripides; you're the proper accompaniment
 for these songs to be sung to.

Di. This Muse used to be—well, she certainly
 wasn't part of the Lesbian tradition!

Aes. Ye halcyons who jabber
 amid the ever-flowing waves of the sea,
 moistening and bedewing the skin
 of your wings with its watery drops—
 and ye spiders in the nooks under the roof
 who wi-i-i-i-ing with your fingers
 the loomstretched bobbintread
 whereon the tuneful shuttle plies its art—
 where the pipe-loving dolphin leaped
 at the prows with their deep-blue rams
 to the oracle and the race-track,
 bright joy of the vine's blossom,
 tendril of the grape that banishes toil and
 trouble—fling your arms around me, baby!

Do you observe that foot? Di. I do.

Aes. And how about that one? Do you see it?

Di. I do.

Aes. When that's the sort of stuff you compose,
 you have the audacity to criticise my lyrics,
 you who manoeuvre your parts
 in the Twelve Tricks of Cyrene? (tr.

Sommerstein)

T3. Pherecrates 155 K.-A. (*Chiron*)

Μουσ. Λέξω μὲν οὐκ ἄκουσα· σοὶ τε γὰρ κλυεῖν
 ἐμοὶ τε λέξαι θυμὸς ἡδονὴν ἔχει.
 ἐμοὶ γὰρ ἦρξε τῶν κακῶν Μελανιππίδης,
 ἐν τοῖσι πρῶτος ὃς λαβὼν ἀνήκε με
 χαλαρωτέραν τ' ἐποίησε χορδαῖς δώδεκα.
 ἀλλ' οὖν ὅμως οὗτος μὲν ἦν ἀποχρῶν ἀνὴρ
 ἔμοιγε < > πρὸς τὰ νῦν κακά.
 Κινησίας δέ < μ' > ὁ κατάρατος Ἀττικὸς,
 ἐξαρμονίους καμπὰς ποιῶν ἐν ταῖς στροφαῖς
 ἀπολῶλεχ' οὕτως, ὥστε τῆς ποιήσεως
 τῶν διθυράμβων, καθάπερ ἐν ταῖς ἀσπίσιν,
 ἀριστερ' αὐτοῦ φαίνεται τὰ δεξιὰ.
 ἀλλ' οὖν ἀνεκτὸς οὗτος ἦν ὅμως ἐμοί.
 Φρύνις δ' ἴδιον στρόβιλον ἐμβαλὼν τινα
 κάμπτων με καὶ στρέφων ὅλην διέφθορεν,
 ἐν πέντε χορδαῖς δώδεχ' ἁρμονίας ἔχων.
 ἀλλ' οὖν ἔμοιγε χροῦτος ἦν ἀποχρῶν ἀνὴρ·
 εἰ γὰρ τι καξήμαρτεν, αὐτίς ἀνέλαβεν.
 ὁ δὲ Τιμόθεος μ', ὦ φιλότατη, κατορώρυχε
 καὶ διακέκναικ' αἰχίστα. Δικ. ποῖος οὗτος
 < ὁ > Τιμόθεος; Μουσ. Μιλήσιός τις πυρρίας.
 κακά μοι παρέσχεν οὗτος, ἅπαντας οὓς λέγω
 παρελθῆναι, ἄγων ἐκτραπέλους μυρμηκίας.
 καὶ ἐντύχηι πού μοι βαδιζούσηι μόνηι,
 ἀπέδυσσε κἀνέλυσε χορδαῖς δώδεκα
 ἐξαρμονίους ὑπερβολαίους τ' ἀνοσίους
 καὶ νιγλάρους, ὥσπερ τε τὰς ῥαφάνους ὅλην
 καμπῶν με κατεμέστωσε

Mrs Music-and-Dance: I will tell you and gladly. For your heart takes pleasure in hearing and mine in telling. Melanippides was the start of all my troubles, being the first of them to grab me and loosen me up and make me slacker with twelve strings. But still this man was acceptable to me, compared with my current woes. Then Cinesias, that damned Athenian, by inserting off-key modulations in his stanzas, so completely destroyed me that in the creation of his dithyrambs his right seems to be his left, like object in a mirror. But even he was an acceptable man for me. Then Phrynīs thrust in his own whirlwind and just about killed me, turning and twisting me with his twelve harmonies of five strings. But still he treated me all right and if he did me wrong, he soon made it up to me. But now, my dear, Timotheus has buried and scraped me most indecently.

Justice: What's this Timotheus like?

Mrs Music-and-Dance: A certain redhead from Miletus. He has caused me real problems and far outdone these other men I mentioned, leading me along his bizarre ant paths. If he meets me when I am out walking by myself, he has me stripped and undone on twelve strings.

Off-key and unholy superfluous trills, and just like a cabbage he [Philoxenus] has stuffed me full of wrigglers.

(tr. Storey)



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‘Without Timotheus, Much of Our *Melopoia* Would not Exist; But without Phrynis, There Wouldn’t Have Been Timotheus’

Pherecrates’ Twelve Strings, the Strobilos and the Harmonic Paranoia of the New Music

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Abstract

In this paper, I offer a close discussion of the musical innovations attributed to Phrynis, Timotheus and other ‘New Musicians’ mentioned in a famous fragment of Pherecrates’ Chiron, interpreting this fascinating passage in the light of the extant evidence about ancient harmonic theory and practice, as well as the latest research findings. More specifically, I shall advance a new hypothesis concerning the nature of Phrynis’ innovative ‘twister’ (*strobilos*): producing a special bending (*kampē*) of a semitone, this gadget allowed Phrynis to combine five different *harmoniai* (Dorian, Phrygian, Lydian, Iastian and ‘Loose Lydian’) in one and the same twelve-string tuning. Making a subtle modification to this device, Timotheus further expanded the harmonic palette of his twelve-string *kithara*, introducing the lamenting *aulos*-mode par excellence, the Mixolydian, into the realm of lyre music. Philoxenus increased this system by adding an extra string, reaching the 13-step arrangement that is at the heart of Aristoxenian harmonic theory.

Keywords

New Music – Timotheus – Phrynis – *polychordia* – *strobilos* – modulations – harmonic theory – Aristoxenus – Ptolemy

‘Without Timotheus, much of our *melopoia* would not exist; but without Phrynis, there wouldn’t have been Timotheus’: so writes Aristotle in a famous

passage of the *Metaphysics*.¹ In this paper, I shall offer a close discussion of the musical innovations attributed to these and other ‘New Musicians’ mentioned in a much-debated fragment of Pherecrates’ *Chiron*, reading this intriguing, if at times enigmatic, passage in the light of the extant evidence about ancient harmonic theory and instrumental practice. In particular, I aim to show how the technical innovations that Pherecrates ascribes to Phrynis—notably his use of ‘exharmonic’ bends (*kampai*) and his introduction of a mysterious ‘twister’ (*strobilos*)—indeed played a crucial role in expanding the harmonic palette available to virtuoso *kithara* players, and thereby paved the way for the complete ‘destruction’ of the esteemed *harmonia* of old undertaken by Timotheus and further expanded by Philoxenus.

1 Pherecrates’ *Chiron*: The Harmonic Evolution of the New Music and the Rivalry between *Auloi* and *Kitharai*

Let us start by sketching briefly the dramatic context of the Pherecrates fragment, which is preserved in the Pseudo-Plutarchan treatise *On Music* (1141d-1142a = fr. 155 K.-A.).² In this remarkable piece, a personified Lady Music is put on stage and her body displays clear signs of ill-treatment. To explain her sorry state, Lady Music provides her interlocutor, Lady Justice, with a detailed account of the savage and perverted attacks she suffered on the part of the most distinguished exponents of the avant-garde style known in modern scholarship as the ‘New Music’. In order to portray appropriately their violent ‘contempt for law’ (*paranomia*), Lady Music plays with technical notions and specialised vocabulary related to the realm of string music, producing a long series of effective and provocative double-entendres. For instance, she laments that Melanippides ‘made [her] slacker with his twelve strings’,³ whereas Phrynis ‘bent and twisted’ her body ‘into five different modes (*harmoniai*)’ with his new instrument of torture, the ‘twister’ (*strobilos*).⁴ And when Timotheus

1 Arist. *Metaph.* 993b15f. εἰ μὲν γὰρ Τιμόθεος μὴ ἐγένετο, πολλὴν ἂν μελοποιίαν οὐκ εἶχμεν· εἰ δὲ μὴ Φρύνις, Τιμόθεος οὐκ ἂν ἐγένετο. See also Phot. *Bibl.* 320b. I wish to thank the anonymous reviewer for his helpful and detailed remarks, and Dr Enrico E. Prodi for discussing with me some textual issues raised by the Pherecrates fragment.

2 A Greek text and a new English translation of this passage are provided in an appendix to this article. All translations are mine, unless otherwise noted.

3 Fr. 155.5 χαλαρωτέραν τ’ ἐποίησε χορδαῖς δώδεκα.

4 Fr. 155.14-16 Φρύνις δ’ ἴδιον στρόβιλον ἐμβαλὼν τινα / κάμπτων με καὶ στρέφων ὄλην διέφθορεν, / εἰς πέντε χορδαῖς δώδεχ’ ἁρμονίας ἔχων. Here I have adopted Martin West’s brilliant emendation εἰς for the MSS ἐν: cf. West 1992a, 28f.

found her walking on her own—a neat image that hints at solo musical performances and, at the same time, casts Lady Music in a rather unflattering light by Athenian standards⁵—he ‘untied’ her and ‘loosened her up’ with his twelve strings.⁶

Here we are already faced with the first puzzling element of this story, namely Pherecrates’ insistence on strings: why did he choose to centre his parody on stringed instruments, and not on the *aulos*? One could think that Pherecrates’ preference stemmed simply from the fact that strings offered him plenty of useful material for his sexual innuendos. This is of course the case, but it would not have been any less true for the *aulos*, especially given the dubious moral reputation that female *aulos* players had in Classical Athens.⁷

The *aulos* would have been a perfect candidate also for another important reason, namely that the bold musical innovations introduced by the New Musicians were epitomised by the development of a ‘new’, highly mimetic kind of dithyramb—the realm of *aulos* music par excellence.⁸ The same applies also to the other key battlefield of the New Music, which was known in antiquity as ‘theatrical music’ (*skēnikē mousikē*): the performance of tragedies and comedies, once again genres normally accompanied by the *aulos* and not lyres.

Technical evidence too shows that the much-discussed harmonic innovations characteristic of the New Music originated in *aulos* playing. For instance, immediately before quoting the Pherecrates passage that is the focus of our discussion, the author of the Pseudo-Plutarchan treatise explicitly identifies the *polyphōnia* characteristic of the *aulos* as the origin of the ‘multiplication of notes’ that marked the first ‘musical revolution’ of Greek history, i.e. the new dithyrambic style developed by Lasus (*Mus.* 1141c *πλείοσί τε φθόγγοις καὶ*

5 Only prostitutes and slaves would walk unaccompanied, whereas ‘respectable’ women did not normally leave their homes (and at times even their chambers) unattended: e.g. Hom. *Od.* 1.328–36, Theognis 1.579–82, and SEG 39.868 (Keos), a decree which prohibits ‘free women and girls’ from walking alone, and establishes fines of ten and five drachmas for these offences.

6 Fr. 155.25 *ἀπέλυσε κἀνέλυσε χορδαῖς δῶδεκα*.

7 Cf. Lynch 2018.

8 See e.g. Pratin. *PMG* 708 (= Ath. 14.617b–f), who vehemently attacks the preeminence gained by virtuoso *aulos* players over choruses. Taplin (1987, 103) suggests that line 10 might contain a pun on Phrynis’ name: *παῖε τὸν φρυνεοῦ ποικίλου πνοᾶν ἔχοντα* (φρυνεοῦ Girard; φρυναίου MS A). If his thought-provoking suggestion is correct, then Pratinas would be attacking here the skilled auletes that ‘have the breath of the mottled toad/Phrynis’, i.e. those that performed his innovative dithyrambs. On Phrynis’ harmonic innovations, see § 4 below.

διερριμμένοις χρησάμενος).⁹ The author significantly highlights that this first paradigm shift was akin to the radical harmonic revolution brought about by Melanippides in more recent times—that is to say, precisely the ‘first offender’ mentioned by Lady Music in Pherecrates’ *Chiron*. Similarly to Lasus, Melanippides too ripped ancient music ‘into a multiplicity of notes’ (διέρριψεν εἰς πλείονας φθόγγους, 1141c), thereby mangling the revered model of the seven-stringed lyre *harmonia* traditionally ascribed to Terpander.

In similar vein, the most renowned Classical aulete, Pronomus of Thebes, was remembered as the first to have been able to play all of the three basic *harmoniai*—Dorian, Phrygian and Lydian—on one and the same instrument.¹⁰ The crucial importance of this kind of modulations for the innovative style of the New Music is discussed in a famous passage by Dionysius of Halicarnassus, which provides us with further interesting details:

οἱ δὲ γε διθυραμβοποιοὶ καὶ τοὺς τρόπους μετέβαλλον Δωρίους τε καὶ Φρυγίους καὶ Λυδίους ἐν τῷ αὐτῷ ᾄσματι ποιοῦντες, καὶ τὰς μελωδίας ἐξήλλαττον τότε μὲν ἐναρμονίους ποιοῦντες, τότε δὲ χρωματικές, τότε δὲ διατόνους, καὶ τοῖς ῥυθμοῖς κατὰ πολλὴν ἄδειαν ἐνεξουσιάζοντες διετέλουν, οἳ γε δὴ κατὰ Φιλόξενον καὶ Τιμόθεον καὶ Τελεστήν, ἐπεὶ παρὰ γε τοῖς ἀρχαίοις τεταγμένος ἦν καὶ ὁ διθύραμβος.

DION. HAL. COMP. 19.85.18–86.7

Indeed, composers of dithyrambs used to switch between modes too, employing Dorian ones as well as Phrygian ones and Lydian ones in the same song; they changed also melodic patterns, making them sometimes enharmonic, sometimes chromatic and sometimes diatonic. And they persevered in practicing such licences with great impudence also in their rhythms—I mean composers such as Philoxenus, Timotheus and Telestes, since among the ancients the dithyramb too was orderly and regulated.

9 According to Martin West (1992b, 346), Lasus’ innovations may have consisted in introducing enharmonic divisions of the semitone into vocal music, following the model of the ‘all-toned’ *aulos* (Pind. *O.* 7.12, *P.* 12.19)—a flexibility that diatonic lyres could not emulate. For the contrast between an archaic *aulos* style featuring undivided semitones and a later archaic/early Classical one with divided semitones, cf. [Plut.] *Mus.* 1135a-c and 1137a-b. See also D’Angour 2011, 195–229.

10 Paus. 9.12.5, Ath. 14.631e. These auletic modulations were made possible by the introduction of rotating collars: cf. West 1992b, 87, 97. On the basic nature of these three modes, see e.g. [Plut.] *Mus.* 1134a (archaic auletes used these three modes in different strophes, switching instruments between them), Bacch. 303.3f. Jan, and other passages discussed below.

Once again, we are told that the defining trait of this innovative musical style consisted in an intensive use of various sorts of modulations. Harmonic modulations clearly take central stage,¹¹ and affect not only the basic structures of the scales—changing between Dorian, Phrygian and Lydian systems—but also their inner ‘melodic paths’ (*melōidiai*), moving between enharmonic, chromatic and diatonic divisions of the tetrachord.¹²

These daring experiments are again attributed to our ‘usual suspects’, Timotheus as well as his younger colleagues Philoxenus and Telestes, and their highly mimetic dithyrambs. And yet, there was another equally distinguished and innovative musical genre that was strictly related to stringed instruments: the so-called *nomoi*, solo musical songs accompanied by the professional many-stringed *kithara*. As one of the Aristotelian *Problems* tells us (19.15), these solo songs were particularly suited to musical contests because of the extraordinary mimetic qualities that stemmed from their technical complexity. Thanks to frequent modulations and a rejection of antistrophic structures in favour of ‘through-composed’ free-forms, professional kitharodes were capable of producing sustained mimetic representations¹³ in ‘long and multiform’ songs,¹⁴ which undermined the consistent ethos preserved by simpler unmodulating choral pieces.¹⁵ Interestingly, the only extended specimen of kitharodic *nomoi* that has survived to this day is precisely by Timotheus (*Persians*, *PMG* 791), and confirms many of these traits with regard to its dramatic and rhythmical qualities.¹⁶

More generally, we know that *polychordia* (‘many-stringedness’) became one of the characteristic hallmarks of the New Music, both in a positive sense in the New Musicians’ unabashedly proud self-promotion and as a symbol of

11 The same contrast between an earlier focus on rhythmical variations, and a later interest in melodic/harmonic modulations is outlined at *Mus.* 1138b–c.

12 These terms correspond to the three basic genera identified by Aristoxenus (e.g. *ap.* [Plut.] *Mus.* 1143e): enharmonic (quartertone+quartertone+ditone), diatonic (semitone+tone+tone) and chromatic (semitone+semitone+tone-and-a-half). These basic models could be subject to subtle alterations known as tuning ‘shades’: cf. Barker 1989, 12f.

13 [Arist.] *Prob.* 19.15, 918b16–18 καθάπερ οὖν καὶ τὰ ῥήματα, καὶ τὰ μέλη τῇ μιμήσει ἡκολούθει ἀεὶ ἕτερα γινόμενα.

14 [Arist.] *Prob.* 19.15, 918b15f. ἡ ᾧδὴ ἐγίνετο μακρὰ καὶ πολυειδής. Cf. Gaud. 331.18f. Jan, on the multiform realisations (πολυειδώς) of the chromatic genus, a point that is relevant for the discussion below (esp. § 5). The same features characterised also solo songs employed in late tragedy (*apo tēs skēnēs*, *Prob.* 19.15, 918b26–29).

15 [Arist.] *Prob.* 19.15, 918b22–25 μεταβάλλειν γὰρ πολλάς μεταβολάς τῷ ἐνὶ ῥῶν ἢ τοῖς πολλοῖς, καὶ τῷ ἀγωνιστῇ ἢ τοῖς τὸ ἦθος φυλάττουσιν. διὸ ἀπλούστερα ἐποίουν αὐτοῖς τὰ μέλη. ἡ δὲ ἀντίστροφος ἀπλοῦν [...]. Cf. Aristid. Quint. *Mus.* 15.19f.

16 Cf. Hordern 2002.

its corrupted ethos in the eyes of conservative critics.¹⁷ As Plato tells us, this *polychordia* represented an attempt to emulate the astounding modulating capabilities of the *aulos* on professional stringed instruments, to such an extent that the *aulos* could be ironically described as ‘the most polychord’ instrument of all.¹⁸ This witty remark clearly hints at important technical developments, which we can identify in greater detail thanks to the testimony offered by other Classical sources. For instance, a celebrated fragment by Ion of Chios extols the rich harmonic palette of his new eleven-stringed lyre and highlights its unprecedented ability to produce ‘concordant three-way paths of *harmonia*’ (fr. 32 W.²).¹⁹ We also hear of special kind of short-lived lyre, called the ‘tripod’ (Ath. 14.637b-f), which was invented by Pythagoras of Zakynthos and allowed him to switch between Dorian, Phrygian and Lydian modes without changing instrument or retuning—that is to say, precisely the feat accomplished by Pronomus on the *aulos*.

All these testimonies clearly indicate that the competition between *auloi* and professional lyres was one of the key stimuli that led to the development of the complex, if controversial, harmonic modulations characteristic of the New Music, and the beginning of this process is to be identified in the realm of *aulos* music.

In keeping with this, in his ground-breaking 2010 monograph, Stefan Hagel has cogently shown that the ‘ancient scales’ preserved in Aristides Quintilianus’ *De Musica* record precisely the arrangement of different modes on modulating *auloi*. In fact, if we set each scale to the pitch of its respective ‘intermediate note’ *mesē*²⁰—the note that was the key reference point for ancient scales,

17 On the politics of *polychordia*, see Csapo 2004, Power 2007 and LeVen 2014, 81–83. On the *oligochordia* of the archaic music destroyed by Crexus, Timotheus and Philoxenus, cf. [Plut.] *Mus.* 1135d.

18 Plat. *Resp.* 3.399d3–5 (ἡ οὐ τοῦτο πολυχорδότατον, αὐτὰ τὰ παναρμόνια αὐλοῦ τυγχάνει ὄντα μίμημα [...]), with Lynch 2016a, 183f. See also *PMG* 947.

19 As I will show elsewhere, Ion’s reference to the *harmonias triodous* available in his eleven-stringed lyre tuning most likely refers to the set-up required to modulate between the traditional seven-stringed forms of the Dorian, Phrygian and Lydian *harmoniai* on the same instrument, without stopping to retune it. A different but kindred account of this passage is offered in West 1992a, 23–8.

20 The relative pitch of the ‘intermediate notes’ (*mesai*) of different modes is enshrined in the Greek notation system (Hagel 2010, 13), and is also discussed in theoretical treatises (esp. Ptol. *Harm.* 54–64, with Barker 1989, 23–5, 327–37). Hence, we know for instance that Lydian *mesē* stands a tone above Phrygian *mesē*, which in turn stands a tone above Dorian *mesē*. As for the absolute pitch of these notes, Hagel (2010, 452f. and 68–92) has persuasively shown that Lydian *mesē* corresponded approximately to our modern *a*, making Phrygian *mesē* *g*, Dorian *mesē* *f* and so on. See also Aristox. *El. harm.* 47.1–16 Da Rios, where the author describes two modulating systems that arranged the *harmoniai* on the basis of

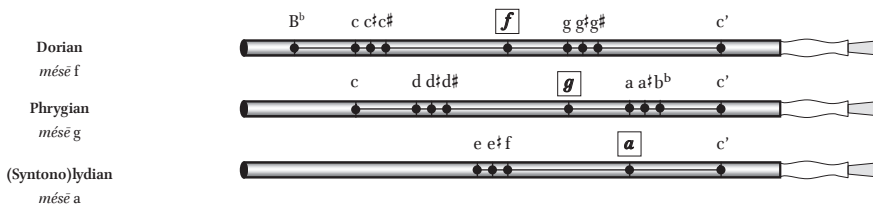


FIGURE 1 The Aristides scales as *aulos* modes (selection of Dorian, Phrygian, Lydian; half sharp sign # indicates quarter-tone intervals)

just as the tonic is for us²¹—it becomes apparent that these scales belong to one and the same modulating instrument, as their top notes fall on the same pitch and the rest can be accounted for fairly easily in terms of instrumental design.²²

But how could all this be emulated on a lyre? This is the question that will occupy us until the end of this paper and the answer lies, I believe, at the heart of Pherecrates' ironic portrayal of Lady Music's demise.

2 The Basic Structure of Traditional Lyre *Harmoniai*

Before addressing this question, however, we need to take a moment to review some key technical features that informed traditional lyre tunings and set them apart from auletic scales.²³ A clearer understanding of the traditional lyre model will allow us to appreciate its evolution under the influence of the New Musicians' *aulos*-driven experimentations, which ultimately led to the many-stringed *kithara* tuning mocked by Pherecrates.

As Stefan Hagel has shown clearly, two well-defined technical traits characterised the lyre tunings traditionally employed by musicians from Philolaus' time down to Ptolemy. Firstly, lyre tunings had an essentially diatonic nature, in keeping with their Mesopotamian counterparts, even though they admitted some slight variations in their finer tuning shades.²⁴ Secondly, they conformed

the relative pitch of their *mesai*; these systems are probably to be identified with the two archaic 'ways'/'styles' (*tropoi*) mentioned at *El. harm.* 29.18.

21 Cf. [Arist.] *Prob.* 19.36, where the very notion of 'being in harmony' is defined as standing in a specific relation to *mesē*. *Mesē* was also the first string to be tuned (Dio Chrys. 68.7), sometimes to the pitch of an *aulos* (Xen. *Symp.* 3.1.1).

22 Hagel 2010, esp. 34–8 and 390–5.

23 Cf. Aristid. *Quint. Mus.* 77.26f. οὐ γὰρ ταῦτόν ἐστιν εἶδος ἐν τε κιθάρα καὶ ἀλλῷ πρέπον ('for the shape/form of a tune suitable for the *kithara* is not the same as that of the melody proper to the *aulos*').

24 Cf. Hagel 2010, 436.

Philolaus' *harmonía*
(Fr. 6a Huffman)

Ptolemy's *kithára* tunings
(*Harm.* 2.16)

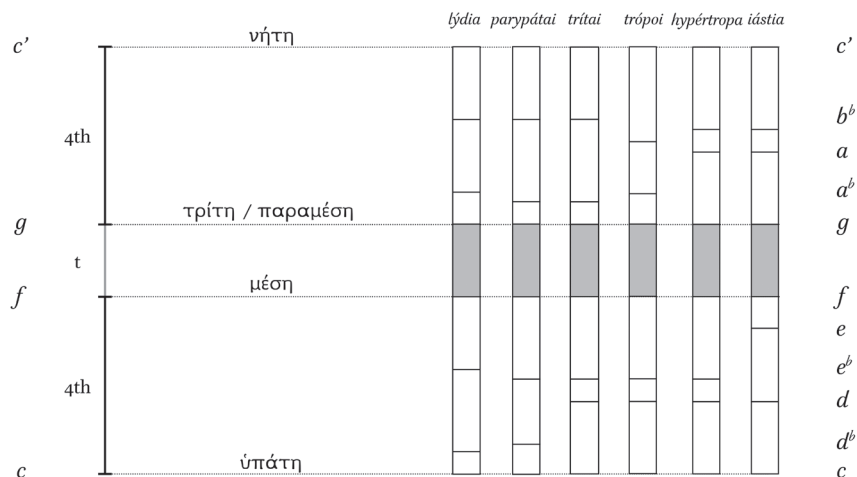


FIGURE 2 The stable framework of lyre *harmoniai*

to a basic framework,²⁵ known as *harmonia* without further qualifications, which spanned an octave and was divided into two tetrachords separated by a tone: an interlocking and symmetrical system of fourths and fifths, which arises from the process of tuning the instrument by means of concords.²⁶ The remarkable consistency of this model is represented in Figure 2, which also shows that this octave *harmonia* was not merely a theoretical construct:²⁷ on the contrary, this framework informs precisely the selection of *kithara* and lyre tunings that Ptolemy records as being still employed by traditional players of these instruments, showing how this practical model remained unchanged throughout Greek culture.²⁸

In this connection, it is telling that one of the Pseudo-Aristotelian *Problems* (19.35a) defines the octave as 'the most beautiful' and the 'most complete' consonance on the grounds that it contains the other two in itself and, therefore, represents nothing less than the 'unit of measurement (*metron*) of melody' as

25 Cf. Hagel 2010, 109 and 196.

26 Cf. Philol. fr. 6 Huffman, with Barker 2007, 265f.; Lynch 2016a.

27 Of course, the framework defined by this octave *harmonia* was destined to play a central role in harmonic theory too, as will become clearer below. But the point I wish to emphasise now is that only lyre/*kithara* tunings conformed consistently to this model, whereas *aulos* modes did not. Cf. Lynch 2016a, esp. 280-3.

28 Ptol. *Harm.* 39.8-17, 80.6-18, with Barker 1989, 356-61 and Hagel 2010, 196.

a whole.²⁹ In keeping with this, the octave framework of *harmonia* and its four stable 'boundaries' (*horoi*)—*c-f-g-c'*—were destined to play a key role also in Aristoxenus' harmonic theory. In fact this set of four notes defines the essential model that underlies Aristoxenus' system as a whole, and he significantly calls them 'fixed/immovable' notes, i.e. notes whose relative pitch should not be altered.³⁰

Therefore, in order to produce different modes on a lyre, it was necessary to 'fit' (*harmozein*) different sequences of intervals within this octave system, starting from the basic diatonic series that results from the process of tuning the lyre by means of 'concorde'.³¹ After setting the pitch of the 'leader' string *mesē*,³² all the other strings were tuned by alternating intervals of fifths and fourths, and the simplest *harmonia* that results from this procedure is nothing less than the renowned Dorian diatonic mode.³³

From this perspective, it is far from surprising to find out that the diatonic genus was regarded as 'the first and the oldest' (Aristox. *El. harm.* 24.20-25.4 Da Rios) or the 'most natural' (*physikōteron*),³⁴ as opposed to the advanced 'technical' character of the chromatic (*technikōteron*) and the exacting nature of the enharmonic.³⁵ This primacy of the diatonic is reflected also in Cleonides' digest of Aristoxenian harmonic theory, where the complete series of the seven octave species (*eidē dia pasōn*) is recorded only in diatonic form (197.4-199.1 Jan).

Another aspect of Cleonides' list suggests a lyre-based conception too. In fact, the seven modes are first listed in descending order of pitch of their relative *mesai*, but then each of them is defined on the basis of the relative placement of the semitones in the sequence: that is to say, precisely the intervals that are 'left behind' (*leimmata*) after setting up a lyre *harmonia* by means of concords (see Figure 3 below).³⁶

In similar vein, the other major source that preserves the list of the seven species of the octave, Aristides Quintilianus, precedes it with an explanation

29 [Arist.] *Prob.* 19.35a, 920a.36-8; see also Ptol. *Harm.* 50.12-20.

30 On the customary division of the notes of a tetrachord into 'fixed' and 'movable', cf. e.g. Aristox. *El. harm.* 28.10-12, 57.13-59.16 Da Rios.

31 δὲ συμφωνίας: cf. e.g. Aristox. *El. harm.* 31.1, 68.15-69.2, 69.9 Da Rios; Ptol. *Aptel.* 1.14.2.5, *Harm.* 1.16.77; [Plut.] *Mus.* 1145b-c. This standard procedure was one of the very first skills learned by lyre students: see e.g. Ar. *Nu.* 968.

32 Dio Chrys. 68.7; on *mesē* as 'leader', see e.g. [Arist.] *Prob.* 19.33, 19.36. Cf. the tuning system for Mesopotamian lyres detailed in UET VII.74, with Franklin 2018.

33 On the basic nature of the Dorian lyre mode, cf. Ar. *Eq.* 984-96; on its distinguished cultural status, see e.g. Plat. *Lach.* 188d.

34 Aristid. Quint. *Mus.* 16.10f.; cf. Theon *Math. Plat.* 56.3-5.

35 Aristid. Quint. *Mus.* 16.12-18, perhaps summarising genuine Aristoxenian material.

36 Cf. Ptol. *Harm.* 23.2 and *passim*, and Plat. *Tim.* 35b4-36b6.

MIXOLYDIAN	ST t t ST t t <u>t</u>
LYDIAN	t t ST t t <u>t</u> ST
PHRYGIAN	t ST t t <u>t</u> ST t
DORIAN	ST t t <u>t</u> ST t t
HYPOLYDIAN	t t <u>t</u> ST t t ST
HYPOPHRYGIAN	t <u>t</u> ST t t ST t
HYPODORIAN	<u>t</u> ST t t ST t t

FIGURE 3 The lyre-based, diatonic species of the octave (Cleon. 198-9 Jan, Aristid. Quint. 15.8-20; *mesē* marked in bold and underlined, St in small caps)

of the special terms employed ‘by the ancients’ to indicate the fourth, the fifth and the octave, namely *syllabē* (‘grasped together’), *dīoxeiōn* (‘through the high-pitched strings’) and *harmonia* (Aristid. Quint. *Mus.* 15.8-20)—terms that, as we know from Philolaus, belonged specifically to the realm of lyre playing.³⁷

3 Pherecrates’ First Offender: Melanippides’ Twelve-string Tuning and the Three Most Ancient *Tonoī*

Keeping all this in mind, let us now go back to Pherecrates’ *Chiron* and look in detail at his comic characterisation of the progressively more heinous crimes perpetrated by the New Musicians against the harmonious body of Lady Music.

The first offender named by Lady Music is Melanippides, who is literally defined as the ‘initiator’ of all her troubles (fr. 155.3, ἐμοὶ γὰρ ἦρξε τῶν κακῶν Μελανιππίδης). Indeed, as mentioned above, Melanippides had already been singled out at the very beginning of this section of the Pseudo-Plutarchan treatise as the first composer who dared to taint the revered seven-stringed tuning that survived untarnished since Terpander’s time. According to Pseudo-Plutarch, Melanippides distorted this ancient model by ripping it into ‘a multiplicity of notes’³⁸—that is to say, exactly the same trait that a few lines earlier characterized the *aulos*’ revolutionary *polyphōnia*.

37 Philol. fr. 6 Huffman, with Barker 2007, 264-76. Aristoxenus credits to Eratocles and his followers the approach according to which different *schēmata* of the octave may be produced by cyclically reordering a fixed sequence of intervals (*El. harm.* 10.19-11.12, 46.7-10).

38 [Plut.] *Mus.* 1141c-d: ‘Similarly also the later composer Melanippides did not remain within the kind of music that preceded him, and neither did Philoxenus or Timotheus. For he (*scil.* Melanippides) scattered about and increased the notes of the lyre, of which there had been seven as far back as Terpander of Antissa (οὗτος γὰρ, ἑπταφθόγου τῆς

As we have seen in paragraph 1, the defining technical feature that corresponded to the ‘multiplication of notes’ first introduced by the New Musicians was the ability to modulate seamlessly between Dorian, Phrygian and Lydian on one and the same instrument—a tuning system that, on the *aulos*, looked something like Figure 1. From this point of view, it is worth noticing that Pherecrates’ Lady Music does not literally say that Melanippides was the ‘first’ (πρώτος) to have achieved the same result on lyres. This is an emendation proposed by Meineke but the manuscript text reads πρώτοις in the plural³⁹—a word that may have entailed a suggestive reference to the ‘first *tropoi*’, following the usage attested in Aristoxenus, Dionysius of Halicarnassus and Bacchius.⁴⁰ This expression is also akin to the words employed by Ptolemy to identify the group of the three ‘most ancient *tonoi*’, once again corresponding to the Dorian, Phrygian and Lydian modes,⁴¹ which according to him were the only ones employed by the ‘ancients’ in traditional songs:⁴²

λύρας ὑπαρχούσης ἔως εἰς Τέρπανδρον τὸν Ἀντισσαῖον, διέρριψεν εἰς πλείονας φθόγγους). And *aulos* music too changed from simpler to more varied: in fact, in the olden days up to Melanippides, the composer of dithyrambs, *aulos* players were paid by poets—a fact which shows how poetry took the lead, whereas *aulos* players were subordinate to chorus instructors. Later on this custom too was destroyed, so that also the comic poet Pherecrates put on stage Music herself in the shape of a woman, her whole body completely disfigured by torture [...]. On the dominant place gained by *aulos* players, cf. Pratin. *PMG* 708 with n. 8 above.

39 Fr. 155.4 K.-A. ἐν τοῖσι πρώτοις ὃς λαβὼν ἀνήκε με. Meineke emendation πρώτος is not very helpful, as it is not clear in what exactly Melanippides would have been the first to take Lady Music. Perhaps the text read something like τρόποισι πρώτοις or πρώτοις τρόποισι (‘taking me in the first ways/manners’)—see above and n. 40.

40 *El. harm.* 29.17–30.1 τοῖς δὲ συνειθισμένοις τῶν ἀρχαῖκῶν τρόπων τοῖς τε πρώτοις καὶ τοῖς δευτέροις ἰκανῶς δῆλόν ἐστι τὸ λεγόμενον. See also Dion. Hal. *Comp.* 19.85f. (quoted above) and Bacch. 303.3f. Jan: ‘those who sing the three *tropoi*, which ones do they sing? (Οἱ οὖν τοὺς τρεῖς τρόπους ἄδοντες τίνας ἄδουσι;) Lydian, Phrygian and Dorian (Λύδιον, φρύγιον, δώριον). And those who sing seven, which ones do they sing? Mixolydian, Lydian, Phrygian, Dorian, Hypolydian, Hypophrygian, Hypodorian.’ As we shall see, this list of seven *tropoi* corresponds exactly to the range of modes that was available on the advanced twelve-string tuning mentioned by Pherecrates. On the use of the term *tropos* to refer to sexual habits, see e.g. Theopompus *ap.* Ath. 6.260f; see also Ar. *Ra.* 1325–30, where Aeschylus accuses Euripides to compose melodies/limbs (μελοποιῶν) on ‘twelve-trick Cyrene’, a famously skilled prostitute, and subsequently mocks the *tropos* of these solo songs (τὸν τῶν μονωδιῶν διεξεληθὲν τρόπον).

41 On the basic nature of the Dorian, Phrygian and Lydian modes, see also Aristid. Quint. *Mus.* 23.1f. (εἰσὶ δὲ τῷ γένει τόνοι <γ>- δώριος φρύγιος λύδιος) and Ath. 14.637d-e (διένειμεν δὲ τὰς τρεῖς χώρας ταῖς τρισὶν ἀρμονίαις τῇ τε δωριστὶ καὶ φρυγιστὶ καὶ λυδιστὶ).

42 Cf. passages quoted in nn. 40 and 41, as well as Ptol. *Harm.* 56.4–6 οὐδὲ οὐ προεκεχόφει τοῖς παλαιοῖς ἢ μέχρι τούτων παραυξήσις τῶν τόνων—μόνους γὰρ ᾗδεισαν τὸν τε δώριον καὶ τὸν φρύγιον καὶ τὸν λύδιον ἐνὶ τόνῳ διαφέροντας ἀλλήλων κτλ. On *parauxēsis* as the origin of new musical scales, cf. Aristid. Quint. *Mus.* 15.6–8.

ἀπλῶς γὰρ τοὺς τρεῖς [*scil.* τόνους] τοὺς ἀρχαιοτάτους, καλουμένους δὲ δῶριον καὶ φρύγιον καὶ λυδῖον παρὰ τὰς ἀφ' ὧν ἤρξαντο ἐθνῶν ὀνομασίας [...] τόνῳ διαφέροντας ἀλλήλων ὑποθέμενοι, καὶ διὰ τοῦτο ἴσως τόνους αὐτοὺς ὀνομάσαντες [...].

PTOL. *HARM.* 62.19-22

The three most ancient *tonoi*, which are called Dorian, Phrygian and Lydian after the name of the people who produced them [...], differ from each other by a tone, and perhaps they called them *tonoi* for this reason [...].

So how would this kind of modulation look on a lyre? As shown above, the Dorian diatonic mode was the basic model for all lyre tunings,⁴³ so that should be our starting point. If we combine it with the Phrygian and Lydian octave species detailed by Cleonides, Aristides and Ptolemy,⁴⁴ a few surprising elements emerge:

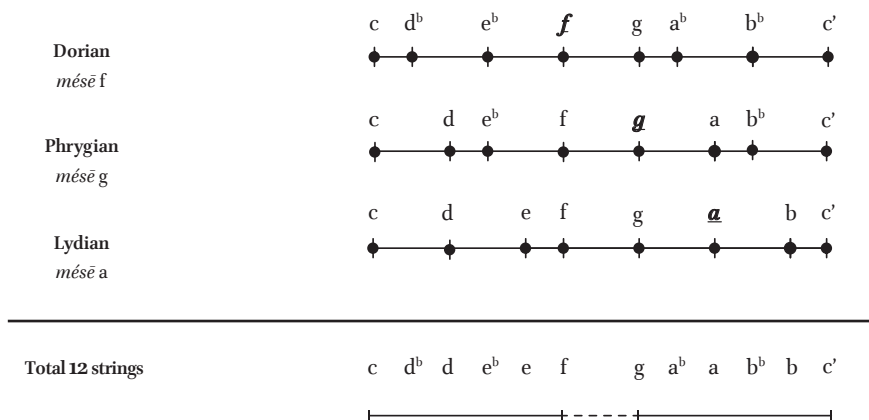


FIGURE 4 Melanippides' twelve-string tuning

First, all three modes conform to the basic framework of the lyre *harmonia*, which covers an octave and comprises two tetrachords separated by a tone (*c-f-g-c'*). Second, the three *mesai* proper to each scale—i.e. the so-called dynamic *mesai*, marked in bold—fall exactly a tone apart, as Ptolemy prescribes.

43 For the sake of clarity, the tuning systems detailed in Figure 4 and following are based on the standard diatonic; however, the practical *kithara* tunings recorded by Ptolemy and reported in Figure 2 above show that these tunings admitted various diatonic shades, and this principle perhaps applied also to the tunings reconstructed in this article.

44 Cf. Figure 3 above.

And the very fact that this tuning structure comprises more than one ‘dynamic’ *mesē* is illuminating, since this is exactly the definition of ‘modulating system’ provided by Cleonides and Aristides Quintilianus:⁴⁵

τῇ δὲ τοῦ <ἀμεταβόλου> καὶ ἐμμεταβόλου διοίσει, καθ’ ἣν διαφέρει τὰ ἀπλᾶ συστήματα τῶν μὴ ἀπλῶν. ἀπλᾶ μὲν οὖν ἐστί τὰ πρὸς μίαν μέσσην ἡρμοσμένα, διπλὰ δὲ τὰ πρὸς δύο, τριπλὰ δὲ τὰ πρὸς τρεῖς, πολλαπλάσια δὲ τὰ πρὸς πλείονας.

CLEON. 201.14-18 JAN

The difference between ‘unmodulating’ and ‘modulating’ systems is the same as that between systems which are simple and those which are not. For simple systems are attuned to one *mesē*, double ones to two, triple ones to three, complex ones to several.

Finally, the number of strings required to produce all these modes on the same instrument is twelve,⁴⁶ that is to say precisely the number of strings that Pherecrates attributes to Melanippides’ tuning.

4 ‘Five *Harmoniai* in Twelve Strings’: Phrynis the ‘Ionian-Bender’ and His Innovative ‘Twister’ (*Strobilos*)

Twelve strings characterise also the tuning that Pherecrates ascribes to Phrynis, the composer that Aristotle singled out as the key precursor of Timotheus’ daring musical style. Pherecrates too highlights the crucial role played by Phrynis in the development of this musical trend, especially with regard to a new ‘gadget’ of his invention: the ‘twister’ (*strobilos*), a device which allowed him to produce special melodic ‘bends’ (*kampai*) that were to become a hallmark of the New Music in general, and his own style in particular.⁴⁷ This ‘bending

45 Aristides Quintilianus (14.24-6) defines ‘unmodulating’ (*ametabola*) systems’ as having one *mesē*, while ‘modulated’ ones (*metaballomena*) as having more than one.

46 An exceptionally detailed representation of a twelve-string *kithara* is offered in a Herculaneum fresco (*Insula* v, 17-18, Guzzo 2003, 105); another remarkable Herculaneum fresco (National Archaeological Museum of Naples, inv. nr. 9109) portrays Chiron—the subject of Pherecrates’ comedy—teaching Achilles to play a many-stringed *kithara* that comprises at least 11 or 12 strings (*non vidi*). For further examples, see West 1992b, 63.

47 See e.g. Ar. *Nu.* 969f.: ‘If one of them dared bending a certain bend (κάμψειν τινα κάμπην) such as those they play nowadays in Phrynis’ style (τὰς κατὰ Φρύνιν), which are so hard to bend (τὰς δυσκολοκάμπτους)’. Cf. Franklin 2013, 226-31; Restani 1983, 156-66.

and twisting', Lady Music tells us, 'destroyed her completely' (κάμπτων με καὶ στρέφων ὅλην διέφθορεν), since Phrynis was able to produce 'up to five *harmoniai* in twelve strings' (εἰς πέντε χορδαῖς δώδεχ' ἁρμονίας ἔχων). But how can we identify the two modes that, added to the three employed by Melanippides, would bring us to a total of five?

Some evidence to this effect is ironically offered by Phrynis' most famous rival, Timotheus. In one of his characteristically smug outbursts,⁴⁸ Timotheus heralds his own victory over Phrynis and calls him disparagingly 'a Ionian bender' (τὸν ἰωνοκάμπταν, *PMG* 802). As some commentators have observed, this nickname cannot possibly allude to Phrynis' origins, given that Timotheus himself was Ionian while Phrynis was not, and must therefore refer to Phrynis' distinctive use of the Ionian mode.⁴⁹

Strikingly, it is indeed possible to incorporate the formalised counterpart of the Ionian mode, the Hypophrygian octave species,⁵⁰ into the twelve-string tuning we have reconstructed for Melanippides without making any alterations to it. In fact, the set of intervals proper to the Hypophrygian *tonos* is already hidden in this harmonic network of sounds, with the only difference that the *mesē* of the new Ionian mode must be identified with a different note, *d* (see Figure 5 below).

But what kind of 'exharmonic bending' did Phrynis apply to this Ionian mode in order to produce a fifth *harmonia*? And how is this related to his infamous *strobilos*?

In 2011, Egert Pöhlmann published the images of two newly discovered tuning mechanisms found in separate tombs in Leucas, dating from the 5th century BC (Figure 6). He defined them as 'tuning pegs' representing 'the immediate forerunners of their Hellenistic counterparts', and proposed to identify them with Phrynis' *strobilos*.⁵¹

While his general reconstruction is very persuasive, there are a few features of the Leucas findings that tell them apart from tuning pegs and suggest a slightly different usage. First, they are made of bone, not wood, making them sturdier than most Hellenistic pegs. Second, these two items were found separately in different tombs, indicating that each belonged to a single instrument, whereas tuning pegs are found in fairly large amounts (up to 28) together with

48 Cf. Tim. *PMG* 791.202-40 and 796, Plut. *De laude ipsius* 539c.

49 Cf. West 1992b, 361. Phrynis came from Mytilene on the island of Lesbos.

50 On the *ēthos* of this mode and its use in imitative, non-antistrophic song, cf. [Arist.] *Prob.* 19.30, 19.48. On the correspondence of Hypophrygian and lastian in traditional *kithara* tunings, cf. Ptol. *Harm.* 39.14, 80.16, with Hagel 2010, 58; see also Winnington-Ingram 1936, 17, 27, Barker 1984, 283, Barker 1989, 360.

51 Pöhlmann 2011, with further bibliography.

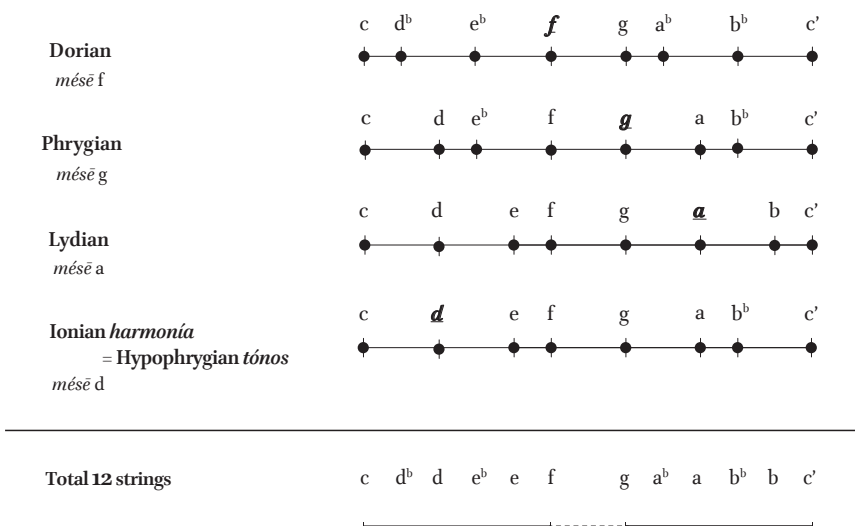
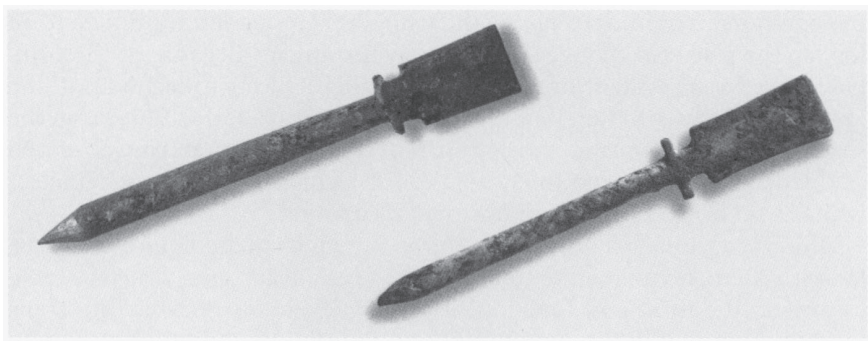
FIGURE 5 Phrynis' Ionian *harmonía*

FIGURE 6 Leucas' tuning mechanisms (Pöhlmann 2011, 128)

the relative instruments.⁵² Finally, the Leucas mechanisms do not feature any holes to fasten the strings, a defining trait of Hellenistic pegs. Their shapes are remarkably different too, especially with regard to the two protruding spikes that are close, but clearly separate from, the large flat head at one end of the shaft.

The combination of these elements opens the possibility that the Leucas tuning mechanisms might not have been exactly tuning pegs but rather individual levers, which could be hinged to the instrument by means of the two protruding prongs and rapidly altered the pitch of a specific note by a

52 See the example of the Dardanos lyres discussed in Byrne 1993, with further references.

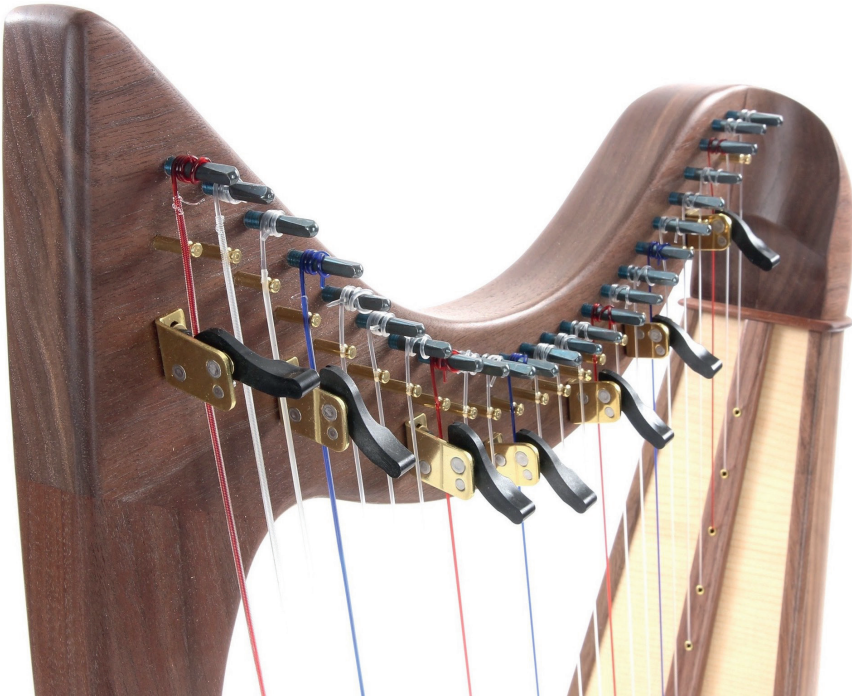


FIGURE 7 Detail of a modern folk harp with sharping levers on C and F strings

well-defined interval. These sorts of devices are still employed nowadays in folk lyres and harps: these so-called ‘sharping levers’ (Figure 7) allow skilled players to modify quickly and easily the pitch of a single string by a semitone in the course of a performance, operating the lever with their left hand without stopping to re-tune the instrument.⁵³

Figure 8A offers schematic representations of this hypothetical device and its support system, which might have been attached to, or otherwise integrated into, the instrument’s yoke. Such a set-up would be consistent with Lady Music’s claim that Phrynys shoved his new twister into her body (ἐμβάλων), and this unique feature of his instrument would have represented a natural target for Pherecrates’ comic verve.

53 See also the so-called ‘hook harps’, diatonic instruments fitted with ‘strong metal J-shaped hooks inserted in the neck’. Thanks to these devices, players can ‘raise the pitch of each string by a semitone simply by turning its hook’. They were originally fitted to the first, second, fourth and fifth degrees of the scale, and gradually spread to all the strings of the instrument (*NG ss.vv.* ‘Harp’ and ‘Hook Harp’).

Both of these points are significantly featured in a scene depicted on Paestan red-figured bell krater by Asteas (Figure 8B and 8C) which is dated around 350 BC and, therefore, is roughly contemporary to the Aristotelian passage quoted at the start of this paper. As shown by recent scholarship, Asteas' so-called '*phlyax* vase' actually represents a comic scene that goes back to Old Comedy and most likely belongs to Eupolis' *Dēmoi*, which was produced around 417-10 BC and was extremely popular up to late antiquity.⁵⁴ The scene reproduced on the Asteas vase portrays a stark opposition between two characters, each identified by an inscription: a young wreathed Phrynis, who holds his *kithara*, and an old man, labelled as Pyronides ('the fiery one' or 'the purifier'—Storey 2011, 94f.), who is trying to drag him away.

The extant fragments of Eupolis' comedy show that its central character was called precisely Pyronides, an old man who attempted to restore the 'virtuous order of old' in a 'degenerate' contemporary Athens. In order to do so, he brought back to life distinguished political leaders of the past, such as Solon and Pericles, who helped him arrest various contemporary troublemakers; hence, as suggested by E. Csapo, the Asteas vase probably shows the moment in which Pyronides tries to drag Phrynis away to punish him for his offences against traditional music.⁵⁵ In this connection, it is worth noting that one of the extant fragments of the *Demes* refers to someone 'whistling away in their instrumental music' (νιγλαρεύων κρούματα, fr. 121 K.-A.)—a rare term that is employed also at the end of the Pherecrates fragment to characterise Philoxenus' musical excesses (see § 6 below).⁵⁶

Against this background, a neglected detail of the Asteas krater becomes particularly significant, namely the device that sticks out from the *kithara*'s yoke and at which Phrynis is pointing with his left index finger (Figure 8B).⁵⁷ Marked in a different colour from the rest of the instrument, this device is clearly distinguished from the yoke as well as the half-rings that hold the strings in place⁵⁸ and cannot be a plectrum, given that Phrynis already holds

54 On the Asteas vase, see Taplin 1993, 42; Goulaki-Voutira 2001-2; Csapo 2010, 61-4. On Eupolis' *Dēmoi*, see Storey 2003 and 2011.

55 Csapo 2010, 61-4, with further bibliography.

56 See also Eup. fr. inc. fab. 326 K.-A., which presents a contest between 'new' and 'old' musical *tropoi*; according to Storey 2003, 170, this unassigned fragment may also belong to the *Demes* and Speaker A should be identified with Phrynis.

57 I am deeply grateful to the Museum of Salerno, and especially Mr Gaetano Guida, for their prompt and courteous help in providing detailed pictures of the vase.

58 For this tuning system, see Hagel 2016, 164. The number of strings depicted on this vase seems to be the traditional seven, not twelve. This might have increased the comic effect of the scene, displaying Phrynis' attack on the traditional *harmonia* even more vividly, but is probably simply a matter of artistic media: it would have been difficult to depict more

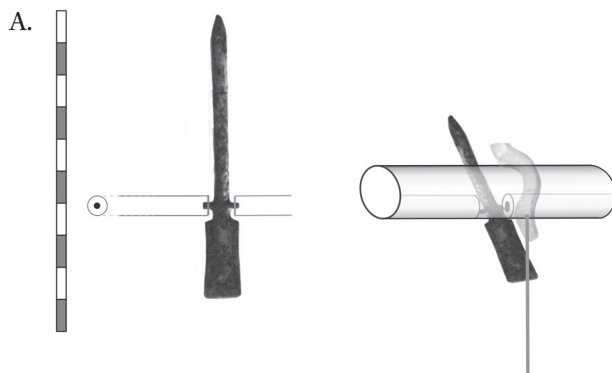


FIGURE 8A
E.g. drawings of the *strobilos* as sharpening lever and its holder, based on the Leucas findings and Elgin yoke (diameter ca. 1.7 cm—Bélis 1985)

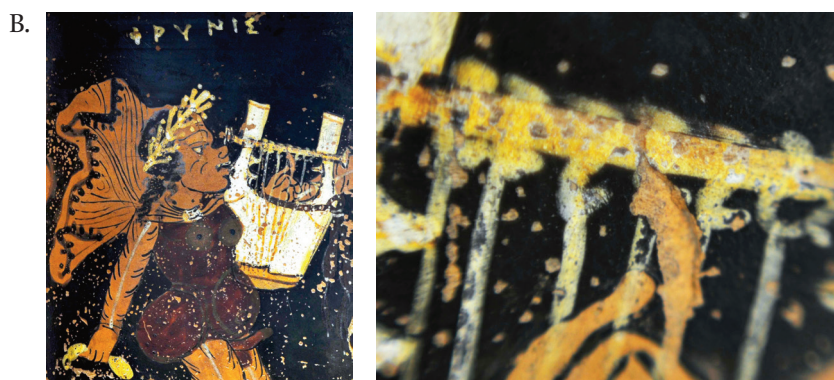


FIGURE 8B Details from the Asteas bell krater, Museo Provinciale Pc 1812—pictures courtesy of Gaetano Guida, Settore Musei, Biblioteche e Pinacoteche, Provincia di Salerno

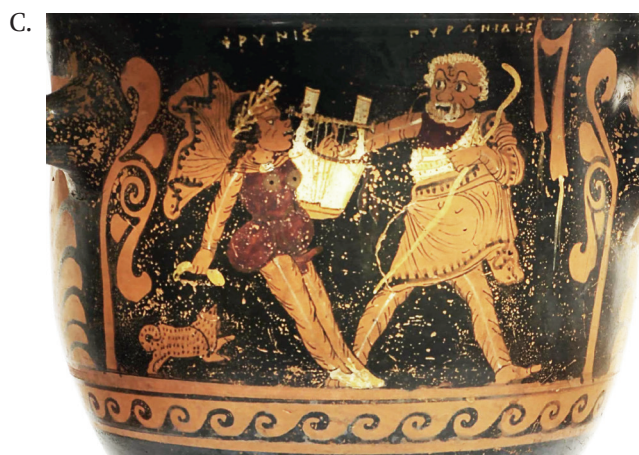


FIGURE 8C
The Asteas bell krater, Museo Provinciale di Salerno Pc 1812—Picture courtesy of Settore Musei, Biblioteche e Pinacoteche, Provincia di Salerno

one in his right hand as usual in visual depictions of kitharodes.⁵⁹ Pictorial constraints aside, its shape is rather similar to that of the Leucas findings and, most importantly, it appears exactly where we would expect it to be: right at the centre of the lyre *harmonia*, breaking it visually into two and representing the main target of Pyronides' anger, as well as the central focus of the scene as a whole. In fact, both Pyronides and Phrynis are staring at it, inviting us to do the same.

The Asteas vase, however, opens up another possibility to explain the functioning of the *strobilos*. As shown in Figure 9 below, the *strobilos* might also have been a sort of modulating key that passed through the instruments yoke but was not exactly a tuning peg, in that it did not support the string. In fact, the Asteas vase shows clearly how the *kithara*'s strings were attached to half-rings placed onto the yoke. Hence, the string would not have been secured to the *strobilos* itself but could have been looped around its shaft before being fixed to the half-ring: in this way, the string's tension could have been altered by rotating the *strobilos*, holding it by its flat head. From this perspective, the two protruding spikes might have served an important function too: as shown in Figure 9, they could have been inserted into a corresponding cross-shaped groove in the yoke, limiting the device's movement to produce approximately a semitone and securing it in place once operated (Figure 9C).⁶⁰ This kind of mechanism, which is literally 'shoved into' Lady Music's body (*emballein*, v.14), could be aptly described as a 'twister' (*strobilos*>*strephein*) since it is turned around itself by the player and, in the process, winds the string around its shaft.

This picture seems to be confirmed by the testimony offered in *P. Oxy.* 14 1704, which records a conveyance of buildings and corn-land at Sesphtha.⁶¹ This property included a water-wheel (μοιλ[αίου] ἀλετικοῦ, *scil.* ἀ[ν]τλητικοῦ) with a 'rotating shaft' or 'windlass' (σὺν στροβίλῳ, line 11), and the basic

strings in a relatively small image such as this one. By contrast, large Herculaneum and Pompeii frescoes portray in painstaking detail *kitharai* with a great number of strings. See for instance the famous twelve-stringed *kithara* shown in Pompeii *Insula* v, 17-18, and the remarkable Herculaneum fresco depicting Chiron and Achilles (see n. 46 above), which shows that the connection between Chiron and many-stringed lyre tunings was still perceived in the 1st century BC.

59 It cannot be a finger either: Phrynis' left hand has five, whereas Pyronides' right hand and fingers are represented in a frontal perspective, like his right foot and toes at the bottom of the scene.

60 The items in Figures 9 and 10 are drawn to scale, so that *strobilos*' flat head corresponds approximately to 2.5 cm and the diameter of the yoke matches that of the Elgin lyre (circa 1.7 cm); Hagel 2016 argues that this was a standard diameter, on the basis of the 5th-century bone tuning pins found in Locri.

61 See also *P. Oxy.* 3641.

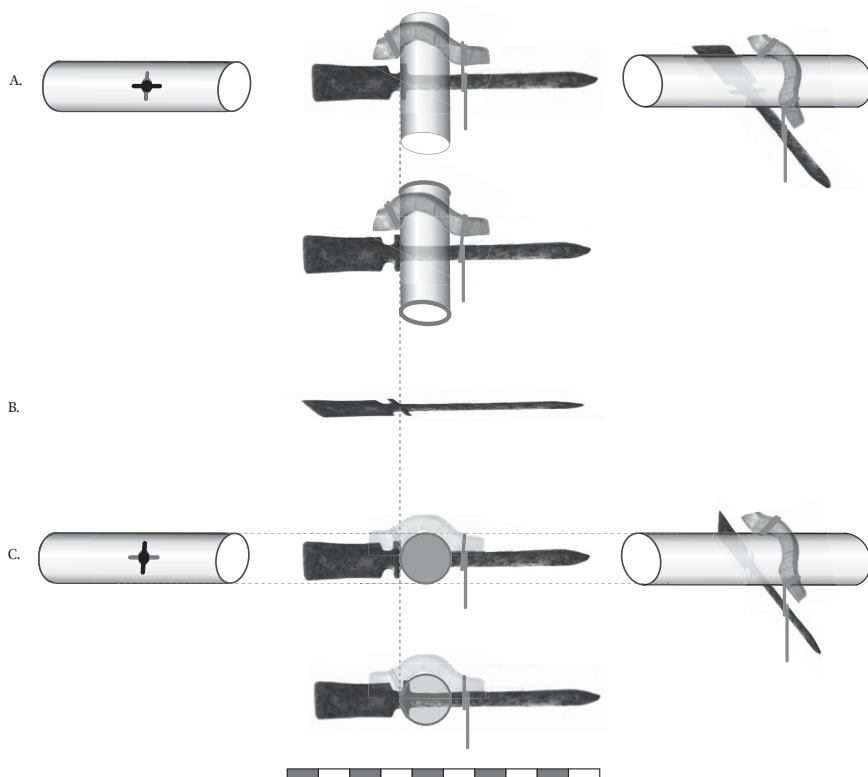


FIGURE 9 Phrynis' *strobilos* as a modulating key and its movements. 9A: The *strobilos* starts from its 'neutral' position, inserted into the yoke, and is then shifted out of the horizontal groove); 9B: it is subsequently rotated, thereby raising the pitch of the string; 9C: it is inserted again into the vertical groove, securing it in place.

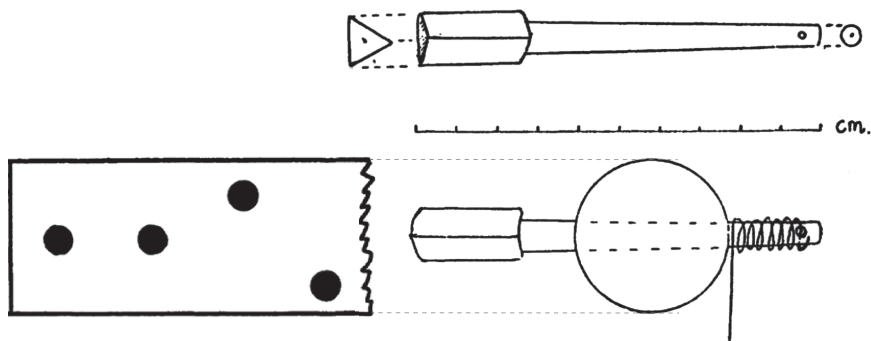


FIGURE 10 Hellenistic tuning pegs, Dardanos lyre (Byrne 1993)

principle behind the functioning of this mechanism is the same as that of the modulating key reconstructed above: the length of the rope attached to the cylindrical barrel is shortened by its rotating motion.

This kind of modulating key could have also inspired the subsequent development of the Hellenistic tuning pegs (Figure 10), which allowed musicians to do away entirely with half-rings or pins and let them fit an even larger number of strings onto their instruments⁶²—more than 20, in the case of the Dardanos lyre—which became more and more similar to many-stringed oriental harps.

Hence, I suggest that Phrynis' 'twister' might have been a device of this kind: a modulating key that raised the pitch of a single string by approximately a semitone, whether or not it should be identified exactly with the Leucas findings.

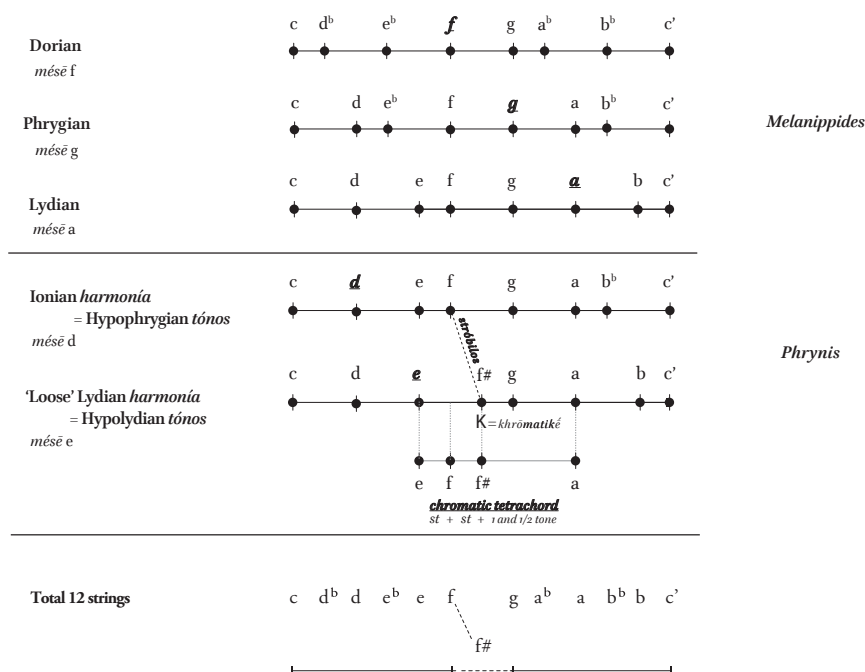
If we take Timotheus' accusation seriously, Phrynis employed this mechanism to alter the structure of the Ionian mode, 'bending' one of its notes in order to produce a fifth *harmonia*. It is indeed possible to achieve this result by altering one of the notes comprised in the Ionian mode we have reconstructed above. This note corresponds to one of the four 'fixed' elements of the basic skeleton of the lyre *harmonia*, its intermediate string *mesē*, *f*: in other words, nothing less than the 'leader' and essential point of reference for the lyre tuning as a whole.⁶³

As shown in Figure 11, if the note *f* is bent up by a semitone, the core *harmonia* (*c-f-g-c'*) of the lyre's body is broken down for the very first time, which is what Lady Music herself laments: 'by bending and twisting me, he destroyed me completely' (κάμπτων με καὶ στρέφων ὅλην διέφθορεν, fr. 155.15). And Phrynis' bends are quite literally 'ex-harmonic', just as those of his predecessor Cinesias,⁶⁴ in that they venture 'out of' the central boundaries of the lyre

62 Interestingly, visual representations of such many-stringed lyres offered in Pompeii and Herculaneum frescoes (e.g. Moregine, Sulpicii villa, Triclinium A; Herculaneum basilica, National Archaeological Museum of Naples, inv. nr. 9109) portray the instrument's tuning pegs at a 45-degree angle to the yoke, just as the *strobilos* in the Astreas vase.

63 On the key role of 'thetic', i.e. Dorian, *mesē*, see above n. 32 and Hagel 2010, 117–22.

64 Fr. 155.9 K.-A. ἐξαρμονίους καμπὰς ποιῶν ἐν ταῖς στροφαῖς, 'making ex-harmonic bends at the turn between strophes'. For this interpretation of the expression ἐν ταῖς στροφαῖς, cf. Xen. *Eq.* 7.15–7, which describes in detail the movements that the jokey should make to guide his horse while undertaking turns (ἐν ταῖς στροφαῖς) and make him 'turn around' (ἀναστρέφειν, κάμπτειν) promptly, skills that were particularly vital in war. This reading explains why Pherecrates' subsequently focuses on the strangeness of the overall 'composition' of Cinesias' dithyrambs (τῆς ποιήσεως τῶν διθυράμβων, fr. 155.10f.): if these exharmonic tricks were performed (by the aulete?) between strophes, then the links between different sections of his compositions would have sounded weird and confusing to a conservative audience, blurring the boundaries between the individual parts of each piece.

FIGURE 11 Phrynis' *strobilos* bending the Ionian mode

harmonia, and produce a new note that is significant in many respects. In fact, *f*[#] corresponds to the note called *chrōmatikē*, a 'colouring' (K in instrumental notation),⁶⁵ and its introduction into the tuning system we have reconstructed defines the sequence of intervals that Aristoxenus would call a 'chromatic' tetrachord (*e-f-f#-a*, St+St+One-and-a-Half tone). Hence, in keeping with the characterisation offered in many technical sources, this genus results precisely from an alteration of the basic diatonic structure of the tuning,⁶⁶ and has an

The military overtones of this expression might shed some light also on the obscure comparison that completes verse 11, *καθάπερ ἐν ταῖς ἀσπίσιν* ('just as in shields', fr. 155.11): cf. Ar. *Eq.* 845-7 and especially Dion. Hal. *Ant. Rom.* 2.70.5.4-10, who describes the features of the Curetes' rhythmical dance 'in armour' (*χορείαν δὲ καὶ κίνησιν ἐνόπλιον*), which was accompanied by the *aulos* and by the 'sound produced by hands on shields' (*καὶ τὸν ἐν ταῖς ἀσπίσιν ἀποτελούμενον ὑπὸ τῶν ἐγχειριδίων ψόφον*).

65 Cf. Hagel 2010, 368.

66 Cf. *P. Hib.* 1.13.15-22, where *chrōma* is used interchangeably with diatonic (cf. Barker 1984, 184f.), and more clearly Adrastus *ap. Theon Math. Plat.* 55.4-6 (*καλεῖται δὲ πάλιν τὸ γένος τῆς τοιαύτης μελωδίας χρωματικὸν διὰ τὸ παρατετράφθαι καὶ ἐξηλλάχθαι τοῦ πρόσθεν*), Nicom. *Ench.* 263.7-10 Jan, and Aristid. *Quint. Mus.* 92.19-26, where the chromatic is defined as 'the diatonic augmented and densely populated with semitones (*χρωματικὸν γένος διατονικόν*)'.

especially ‘technical’ nature (*technikōteron*)—one of the defining labels attached to the New Musician’s avant-garde style.

But there is more. The fifth tuning that results from this upward bending corresponds to nothing else than the diatonic version of the ‘loose’ Lydian mode, the Hypolydian *tonos*;⁶⁷ and the structure of this ‘loose’ Lydian mode was identified exactly in Phrynis’ time: in fact, as Aristoxenus tells us, it was first defined by a slightly older contemporary of Phrynis, the illustrious musical theorist Damon of Oa.⁶⁸

A side-by-side comparison between the ‘loose’ Lydian mode and its ‘standard’/‘tense’ counterpart (Figure 12) reveals two other interesting features.

First, the two tunings are identical except for the effect of the chromatic ‘bending’ of *f* to *f*#. Second, the *mesē* of the ‘loose Lydian’ mode (*e*) is exactly a fourth lower than that of the ‘standard’/‘tense’ Lydian’ (*a*)—a remarkable feature that foreshadows the full system of hypo and hyper scales employed

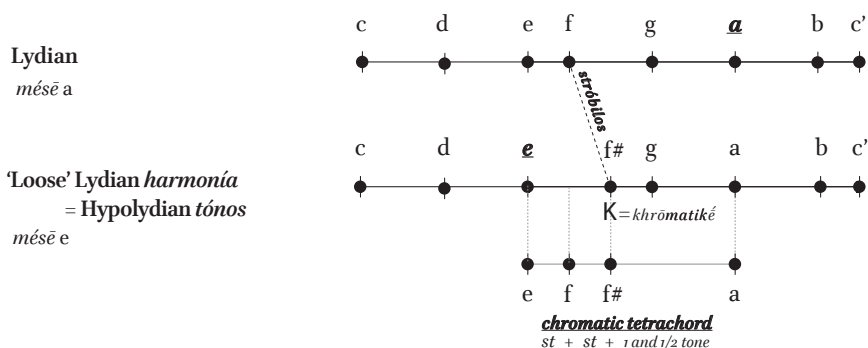


FIGURE 12 ‘Loose’ Lydian vs Lydian *harmonia*

ἐστὶν ηὐξημένον καὶ πεπυκνωμένον ἡμιτονίῳς [...]; it is so called because it colours the other intervals’). Aristoxenus (*ap.* [Plut.] *Mus.* 1137c-e) testifies to the kitharodic origins of this genus; similarly, Philochorus (*ap.* Ath. 14.638a) lists *chrōmata euchroa* among the many innovations developed by the virtuoso *kithara* player Lysander of Sicyon. Cf. Barker 1982.

67 The Hypolydian *tonos* is listed among the ancient scales recorded by Aristides Quintilianus as the equivalent of the ‘Loose Lydian’ *harmonia* mentioned in Plato’s *Republic*. Given that Aristides’ transcriptions reproduce *aulos* scales, it is listed in its enharmonic form. For its diatonic variant, see e.g. Cleon. 198.3-6 and 19f., Bacch. 309.3-5, Gaud. 352f. Jan.

68 [Plut.] *Mus.* 1136e. This passage cannot mean that Damon had literally invented this tuning, since its discovery is credited to the seventh-century aulete Polymnestus at 1141b. For this and other reasons that go beyond the scope of this article, this passage must mean that Damon found out how to incorporate the ‘loose’ Lydian mode within the modulating system of lyre/*kithara* tunings.

in the Greek notation system, as well as the principles that are at the heart of Aristoxenian harmonic science as a whole.⁶⁹

In other words, this new scale could be properly regarded as a ‘looser’ version of the standard Lydian because the introduction of the chromatic note *f*# makes it possible to identify the note *e* as a new *mesē*,⁷⁰ and this new *mesē* is ‘looser’ than the standard Lydian one by a fourth—the interval that in Aristoxenus’ system marks the distance between hypo modes and their standard counterparts.

5 Timotheus’ New Peak of Musical Transgression: Modulating to the Mixolydian Mode ‘Against the Law’

If this reconstruction goes along the right lines, Phrynis could indeed produce up to five different *harmoniai* in a twelve-string tuning thanks to his new ‘twister’. But even all this, Pherecrates’ Lady Music says, was still bearable because Phrynis’ ‘error’ was just temporary—in other words, his sinuous melodic ‘bends’ were passing transitions that occurred in the course of a piece but the standard framework of the lyre *harmonia*, and especially its *mesē f*, would be restored before the end of the performance. So what was it that made Timotheus’ innovations so much worse than Phrynis’, while at the same time being a continuation of his achievements? Why did Timotheus’ music represent at the same time the origin of ‘much of our *melopoia*’, as Aristotle puts it, as well as a new apex of the New Musicians’ transgressions (*paranomia*) against the laws of ancient music (παρὰ νομῶν εἰς τὴν ἀρχαίαν μουσικὴν, [Plut.] *Mus.* 1132e)?⁷¹

Timotheus himself proudly confirms this stern accusation in the self-referential closing section of the *Persians*: ‘the leader of the Spartans’ he says ‘drives me away with fiery blame because I dishonour the older Muse (παλαιότεραν) with new hymns’.⁷² This emblematic event is discussed at length in several historical testimonies and later anecdotes. For instance, the historian Artemon⁷³ reports that ‘Timotheus was generally believed to have used

69 West 1992b, 231 and 257, fig. 9.2.

70 By definition, *mesē* is the note below the disjunctive tone (Cleon. 201.18–20 Jan), so *e* could not be taken as *mesē* before the introduction of the chromatic note *f*#.

71 On Timotheus’ *kainotomia*, cf. Aristox. fr. 76 Wehrli and Satyr. *Vit. Eur.* fr. 39.22.5 Arrighetti. For *kainotomia* and *paranomein*, see Plut. *An seni* 795c–d. More generally, Plat. *Leg.* 700a3–701b3.

72 Cf. Tim. *PMG* 791.206–12.

73 Perhaps Artemon of Cassandreia (3rd/2nd century BC).

a more polychord (πολυχορδοτέρω) tuning system on his *magadis*;⁷⁴ for this reason he was called to account by the Spartans for corrupting ancient music (ὡς παραφθείροι τὴν ἀρχαίαν μουσικὴν) [...] (Ath. 14.636e). Similarly, we hear in the Plutarchan *De Musica* that Timotheus, Philoxenus and their contemporaries had become ‘more vulgar’ and ‘lovers of novelty’, rejecting the ‘few-stringed set-up, simplicity and dignity (*semmotēta*) that is proper to music that is wholly archaic’ (1135d).

Another anecdote reported in a seemingly Aristoxenian passage of the same treatise, just a few pages after the Pherecrates fragment, provides us with some additional clues.

‘Ἄτ’ οὖν ἡθῶν μάλιστα φροντίδα πεποιημένοι οἱ παλαιοί, τὸ σεμνὸν καὶ ἀπερίεργον τῆς ἀρχαίας μουσικῆς προετίμων. Ἀργείους μὲν γὰρ καὶ κόλασιν ἐπιθεῖναι ποτὲ φασὶ τῇ εἰς τὴν μουσικὴν παρανομίᾳ, ζημιῶσαι τε τὸν [ἐπιχειρήσαντα] πρῶτον [τοῖς] πλείοσι τῶν ἑπτὰ χρήσασθαι παρ’ αὐτοῖς χορδῶν καὶ παραμιξολυδιάζειν ἐπιχειρήσαντα.

[PLUT.] *MUS.* 1144E-F

The ancients were primarily concerned with ethical characters, and valued above all the dignity and artless nature of ancient music. Thus the Argives are said to have once laid down a penalty for transgressions against the laws of music, and to have fined the first man who tried to use more than the seven strings that were customary for them and attempted to modulate into the Mixolydian mode against the law (*paramixolydiazein*).

Once again, the musical innovations associated with an increase in the number of lyre strings are explicitly depicted as a breach of the laws of music (*paranomia*), and this uncompromising defence of the nobility and simplicity of ancient music is ascribed to another Dorian community, the Argives. But this testimony is unique in that it sheds light on the strictly technical implications of this moral-cum-aesthetic charge by means of the astonishing and unparalleled verb *paramixolydiazein*.

This term obviously refers to a modulation to the Mixolydian mode but it is the prefix *para*—that makes it particularly illuminating. On the one hand, it echoes the musical *paranomia* mentioned only a few lines before, emphasising its negative ethical implications. On the other, it conveys the idea that the Mixolydian mode is set ‘next to’ the traditional *harmonia* comprising two

74 On the problems raised by this term, see Barker 1988 and West 1983, 79.

tetrachords separated by a tone—a usage that is significantly akin to Ptolemy and Porphyry's use of the verb *parazeugnusthai* to indicate the simultaneous presence of conjunct and disjunct octave arrangements in the Unchanging Perfect System.⁷⁵

This 'illegal' introduction of the Mixolydian mode is again contrasted with the dignity (τὸ σεμνόν) characteristic of traditional music. And precisely this *semnotēs* is identified by Aristoxenus and other authors as the distinctive ethical trait proper to the Dorian mode,⁷⁶ which in turn represented the traditional model for all lyre *harmoniai*. Indeed all the sources which report variations on this anecdote ascribe this stark defence of the traditional seven-stringed *harmonia* to various Dorian people.

In keeping with all this, if we now turn back to our reconstruction of the New Musicians' twelve-string tuning and apply Phrynis' *strobilos* to the Dorian mode, we end up precisely with the Mixolydian *harmonia* (Figure 13).

Just as Phrynis produced the 'Loose Lydian' mode by 'bending and colouring' the Ionian, Timotheus reached a new peak of musical transgression by using Phrynis' mechanism to modulate between Dorian and Mixolydian: in other words, he managed to introduce the lamenting *aulos*-mode par excellence, the Mixolydian,⁷⁷ into the realm of traditional Hellenic lyre music. In order to do so, however, he had to apply Phrynis' mechanism to a different fixed note of the lyre *harmonia*, *paramesē*, switching its pitch between *f#* and *g*.

In addition, he had to change the way in which *strobilos* operated, using it in the exact opposite manner to Phrynis': in fact, in Timotheus' case, the basic pitch of the string *paramesē*, *g*, had to be tuned when the *strobilos* was in its 'vertical', tense position (Figure 9C). The string's pitch would be then 'slackened' to *f#* in the course of the performance, rotating the *strobilos* into its horizontal/'neutral' position (*g* > *f#*, Figure 9A)—a change which, in turn, reveals the structural breakdown of the essential core of the traditional lyre *harmonia* (*c-f#-c*).⁷⁸ And this is exactly what Lady Music accuses Timotheus to

75 Cf. Ptol. *Harm.* 51.19f., Porph. *In Ptol. Harm.* 165.6-20, with Barker 2015, 522-5. On 'Changeless' and the 'Modulating' Perfect Systems and their importance in ancient Greek harmonics, see Barker 2007, 13-18.

76 Aristox. fr. 82 Wehrli (ap. [Plut.] *Mus.* 1136f) ἀλλ' ἐπεὶ, ὡς προείπομεν, πολὺ τὸ σεμνόν ἐστὶν ἐν τῇ Δωριεῖ, ταύτην προετίμησεν. See also Aristox. fr. 84, Luc. *Harm.* 1.12.

77 [Plut.] *Mus.* 1136d1-2 καὶ ἡ Μιξολύδιος δὲ παθητικὴ τίς ἐστι, τραγωδίαις ἀρμόζουσα.

78 As Aristoxenus laments, fashionable musicians like Timotheus 'flattened even the pitch of some of the fixed notes' ([Plut.] *Mus.* 1145d οὐ μόνον τῶν κινεῖσθαι πεφυκότων φθόγγων, ἀλλὰ καὶ τινων ἀκινήτων ἀνιμένων). This is the end of a complex passage that begins with the anecdote on *paramixolydiazein* quoted above, but then delves into finer implications related to tuning shades: see Barker 1984, 244-6. Among other things, this passage offers us a salutary reminder that practicing musicians employed a variety of diatonic and

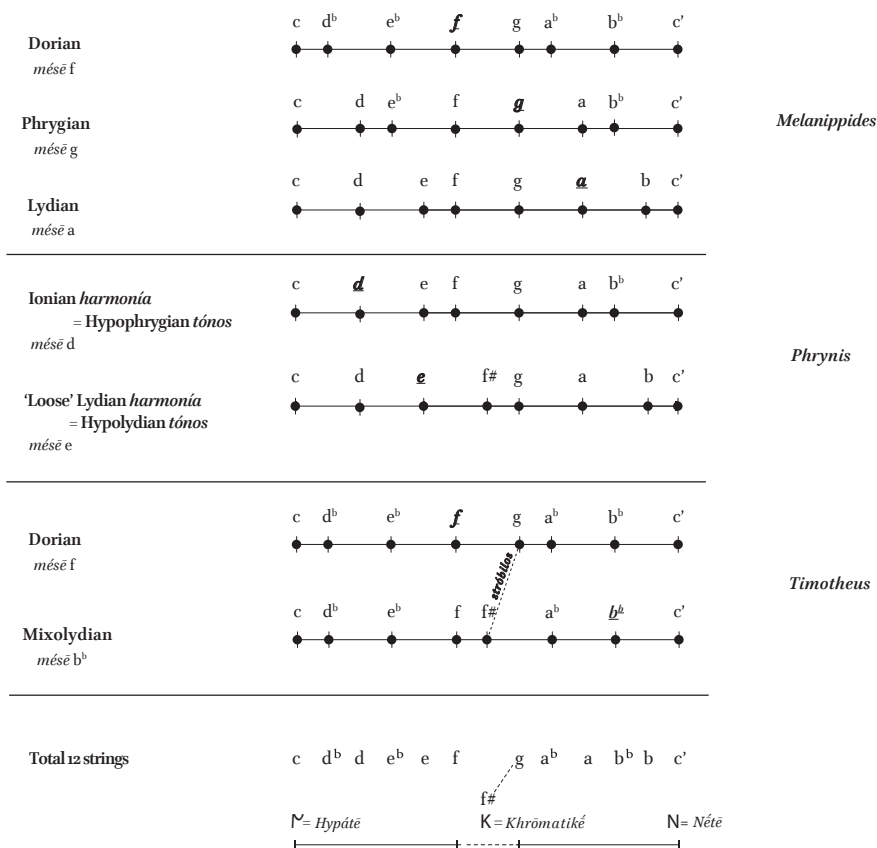


FIGURE 13 Timotheus' 'illegal' modulation from Dorian to Mixolydian

have done: 'he slackened me up (ἀπέλυσε) and loosened me asunder (κάνέλυσε) with his twelve strings' (v. 25).⁷⁹

chromatic shades—a point that of course applies also to the tunings reconstructed in this article.

79 In the closing *sphragis* of the *Persians* (PMG 791.229-33), Timotheus boasts to have 'made the *kitharis* spring up anew, opening the many-hymned chambered treasury of the Muses' with 'metres and rhythms of eleven strikes' (μέτροις ῥυθμοῖς τ' ἐνδεκακρουμάτοις). Timotheus' expression is unlikely to refer to the number of strings of his instrument, as the terms *krousis*/*krouma* indicated the combination of two or more notes that give rise to a melodic figure—i.e., the minimum building blocks of a melody. Cf. *Anon. Bell.* §§ 29-30 ('An instrumental melody is defined as the one that is made of notes combined with each other and is called *krouma*', ὁργανικὸν δὲ μέλος λέγεται τὸ ἐκ τῶν συναφειμένων ἀλλήλοις φθόγγων, ὃ καλεῖται κρούμα) and the musical examples of melodic *krouseis* provided at *Anon. Bell.* §§ 2 and 6 (πρόκρουσις, ἑκάκρουσις, ἑκάκρουσμός, cf. §§ 18 and 68). It is perhaps not coincidental that Timotheus links these basic melodic figures (*kroumata*)

Furthermore, differently from Phrynis' transient bending, this 'loosening' of *g* to approximately *f*# did not need to be 'rectified' before the end of the performance, since the *mesē* of the *kithara* tuning as a whole (*f*) was still available.⁸⁰

Hence, by altering the Dorian mode, Timotheus produced 'deviant' (ἐκτραπέλους, fr. 155.23)⁸¹ and intricate melodies which not only disrupted the essential structure of the traditional lyre *harmonia*, but actually reproduced on his twelve-stringed *kithara* the pair of modes that Aristoxenus presents as the very essence of tragedy: Dorian and Mixolydian, a perfect blend of magnificence and *pathos*.⁸²

Most significantly, this transition between Dorian and Mixolydian corresponds to the 'first consonant *metabolē*' identified by Ptolemy as a key expansion of the traditional system of lyre tunings:

ἀπλῶς γὰρ τοὺς τρεῖς τοὺς ἀρχαιοτάτους, καλουμένους δὲ δώριον καὶ φρύγιον καὶ λύδιον παρὰ τὰς ἀφ' ὧν ἤρξαντο ἐθνῶν ὀνομασίας [...] τόνῳ διαφέροντας ἀλλήλων ὑποθέμενοι, καὶ διὰ τοῦτο ἴσως τόνους αὐτοὺς ὀνομάσαντες, ἀπὸ τούτων ποιοῦσι πρώτην μεταβολὴν σύμφωνον ἀπὸ τοῦ βαρυτάτου τῶν τριῶν καὶ δωρίου τὴν ἐπὶ τὸ ὀξὺ διὰ τεσσάρων, προσαγορεύσαντες τοῦτον τὸν τόνον μιξολύδιον ἐκ τῆς πρὸς τὸν λύδιον ἐγγύτητος, ὅτι μηκέτι τονιαίαν ὄλην πρὸς αὐτὸν ἐποίει τὴν ὑπεροχὴν, ἀλλὰ κατὰ τὸ περιλειπόμενον τοῦ διὰ τεσσάρων μέρος μετὰ τὸ ἀπὸ τοῦ δωρίου ἐπὶ τὸν λύδιον δίτονον.

PTOL. HARM. 62.18-63.1

with his new rhythms: on the relationship between rhythm and melodic profiles in Greek music, cf. Lynch 2016b. See also LeVen 2011, who offers a thought-provoking, non-technical interpretation of the expression μέτροις ῥυθμοῖς τ' ἑνδεκακρουμάτοις.

80 One could not renounce the note *f* in the Dorian mode, given that it is the *mesē* of this tuning as well as the lyre *harmonia* as a whole, whereas the note *g* is not required in the Mixolydian *harmonia*. On the importance of *mesē* in performance, see e.g. [Arist.] *Prob.* 19.20. On the use of the coupling of Dorian/Mixolydian modes at the end of a piece, see Aristox. *ap.* [Plut.] *Mus.* 1142f with discussion below (esp. n. 92).

81 This may be a pun on his transgression of melodic *tropoi*; this term was also applied to deviant laws or habits, e.g. Theognis 1.290 (ἐκτραπέλοισι νόμοις).

82 Aristox. fr. 81 Wehrli (*ap.* [Plut.] *Mus.* 1136d): the tragedians 'took the Mixolydian *harmonia* and joined it together (συζέδει) with the Dorian, because the latter produces magnificence and dignity and the former extreme passions; and tragedy is a mixture of these'. By introducing the chromatic note *f*# into the Dorian mode, Timotheus reproduced on his *kithara* the acute tritone *f*#-*c*', which represented under many respects the hallmark of the Mixolydian mode (Lynch 2016a, 271-3). And the highest note of this twelve-stringed tuning still corresponds to the Dorian *nētē c'* (N in instrumental notation), i.e. the highest boundary of all the Aristides scales (Hagel 2010, 34-8).

The three most ancient *tonoi*, which are called Dorian, Phrygian and Lydian after the name of the people who produced them [...] differ from each other by a tone, and perhaps they called them *tonoi* for this reason. Starting from these, they make the first consonant modulation starting from the lowest of the three, the Dorian, moving up a fourth, calling this *tonos* Mixolydian because of its proximity to the Lydian, since the difference between them was not a tone anymore but the part of the fourth that is left after the ditone between the Dorian and the Lydian.⁸³

Of course, Ptolemy is right in saying that the Mixolydian mode is closer to the Lydian than the other *tonoi*: in fact, there is only a semitone between Mixolydian *mesē b^b* and Lydian *mesē a*, whereas the *mesai* of the other three traditional *tonoi* are a tone apart. In the following lines, Ptolemy describes how to fill out the rest of the tuning, listing first the Hypolydian *tonos*, which corresponds to the ‘Loose Lydian’ *harmonia*, and then the Hypophrygian, the formalised counterpart of the Iastian. After mentioning the seventh and last *tonos*, the Hypodorian, Ptolemy adds a revealing observation:

τὸν δὲ ὑπὸ τὸν δῶριον ὑποδῶριον, ᾧ τόνῳ τὸν διὰ πασῶν ἐσόμενον ἐπὶ τὸ ὀξὺ τὸν αὐτὸν ὄντα προσηγόρευσαν ὑπερμιξολύδιον ἀπὸ τοῦ συμβεβηκότος, ὥς ὑπὲρ τὸν μιξολύδιον εἰλημμένον—τῷ μὲν <ὑπό> καταχρησάμενοι πρὸς τὴν ἐπὶ τὸ βαρύτερον ἔνδειξιν, τῷ δὲ <ὑπέρ> πρὸς τὴν ἐπὶ τὸ ὀξύτερον.

PTOL. HARM. 63.5-8

They called Hypodorian the *tonos* below the Dorian, and the one that was to be at an octave above it, and so was the same as it, they named Hypermixolydian after its essential attribute—that is, on the grounds that it was placed above the Mixolydian, using *hypo* to indicate lower pitch and *hyper* to indicate higher.

The overall meaning of this passage is fairly straightforward: the *mesē* of the Hypermixolydian *tonos* (c') is precisely an octave higher than that of the Hypodorian *tonos* (c) and, therefore, yields the same octave species. For this reason, according to Ptolemy, the Hypermixolydian *tonos* represented just a useless duplication of an existing model. However, why did Aristoxenus and his followers adopt it in the first place?

83 Transl. Barker 1989, slightly modified.

6 Philoxenus' 'Hyperbolic' Trills and the Locrian Mode

We can answer this question by turning to the very last lines of the Pherecrates fragment quoted by Pseudo-Plutarch. As the author warns us, Lady Music is not talking about Timotheus any longer but is decrying Philoxenus' innovations, which she describes as 'ex-harmonic, hyperbolic and immoral whistly trills (*niglarous*)'.⁸⁴ Now, the reference to 'hyperbolic' sounds (ὑπερβολαίους) in a context so dense with technical references of course brings to mind the use of this very term to denote the tetrachord called *hyperbolaion*, which in Aristoxenian theory is placed a fourth above the highest note of the central octave, and therefore falls 'outside' the range of the traditional *harmonia*. In this sense, Philoxenus' hyperbolic trills were literally 'ex-harmonic' (ἐξαρμονίους), as they crossed the upper boundary of the lyre *harmonia* (*c'*), just as Cinesias and Phrynis' chromatic bends crossed the central boundary *f-g* (see Figure 14).

In keeping with this, a passage of the collection of treatises known as *Anonyma Bellermanniana* tells us that 'the hyperbolic region of the voice is the whole area that stretches beyond the Hypermixolydian' (ὑπερβολοειδής ἐστὶ πᾶς ὁ ἀπὸ τοῦ ὑπερμικολουδίου, § 64). As we have seen earlier, in order to introduce the Hypermixolydian *tonos* into our tuning it is necessary to consider the highest note of the Dorian mode (*c'*) as the *mesē* of the new system. But given that *mesē* is by definition a note that lies 'below the disjunctive tone',⁸⁵ for *c'* to be regarded as *mesē* it is necessary to add an extra string that formed an interval

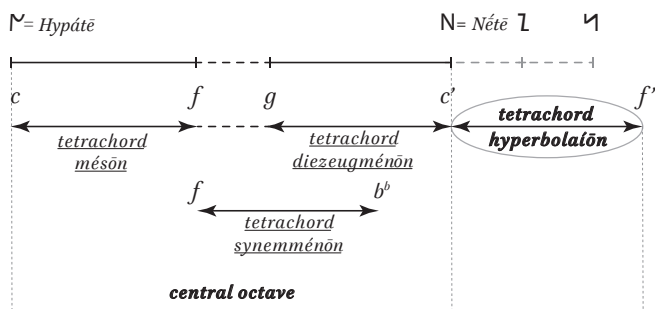


FIGURE 14 The 'hyperbolic' tetrachord

84 This kind of elaborate and high-pitched trills was originally related to the *aulos* (cf. Poll. 4.83, Phot. v 300 Th., *Suda* v 366 A.) and is mocked elsewhere in comic poetry (e.g. Ar. *Ach.* 554, and especially Eup. fr. 121 K.-A., from *Dēmoi*, discussed in § 4 above).

85 Cleon. 201.18-20 Jan; cf. n. 70.

of a tone above it (*d'*): in other words, it was necessary to add precisely the first element of the new *hyperbolaion* tetrachord.

In accordance with this, in these admittedly few lines, Lady Music does not mention anymore the ‘twelve strings’ that featured so prominently in the earlier verses. By contrast, she laments that she was now ‘entirely filled up with wriggling caterpillars, like a cabbage’ (ὥσπερ τε τὰς ῥαφάνους ὄλην καμπῶν με κατεμέστωσε), referring to the unprecedented multiplication of notes, semitones and interval sequences that were now available in her *harmonia* (see Figure 15 below).⁸⁶

But why should we credit this innovation to Philoxenus, given that he is not mentioned directly by Lady Music? Three points make this very likely, in my view. First, in the list of the seven diatonic octave species reported by Cleonides and Bacchius, we are told that the Hypodorian species was also known as *Lokristi*, i.e. the Locrian *harmonia*,⁸⁷ and Pollux explicitly tells us that the Locrian *harmonia* had been ‘discovered’ by Philoxenus.⁸⁸ Of course, this statement cannot mean that he literally invented it, because it dated much before his time.⁸⁹ What this statement must mean, then, is that Philoxenus

86 The same point is highlighted by the commentator at the end of this passage, who reports that ‘other comic playwrights too put on display the strangeness of those who chopped music up in these ways (τῶν μετὰ ταῦτα τὴν μουσικὴν κατακεκερματικῶτων)’.

87 Cleon. 198.10–13 (ἔβδομον τὸ ὑπὸ βαρυπύκνων περιεχόμενον, οὗ πρῶτος ὁ τόνος ἐπὶ τὸ βαρὺ [...] ἐκαλεῖτο δὲ κοινὸν καὶ λοκριστὶ καὶ ὑποδώριον), Bacchius 309.7–9 Jan (ἔβδομον δὲ οὗ ἔβδομος [...] ἐκαλεῖτο δὲ ὑποδώριον καὶ κοινὸν καὶ λοκριστὶ). As we have seen earlier, the Hypodorian octave species was identical to the Hypermixolydian, which therefore is not included in the list. On the surface, the testimony of Heraclides of Pontus may seem to contradict Cleonides and Bacchius, since he identifies a Hypodorian *melos* with a different *harmonia*, the Aeolian (Ath. 14.624f). But the contradiction is only apparent. As I will argue in greater detail elsewhere, Heraclides is referring to a different understanding of the suffix *hypo-*: unlike the Aristoxenian usage (*hypo-* = *mesē* a fourth lower), the suffix *hypo-* is employed here to indicate a *tonos* that is placed ‘immediately below’ the Dorian—a usage that, as Heraclides says himself, stems from the practical approach of *aulos*-players (14.625a) and leads to a multiplication of *tonoi* unrelated to octave species. The same correlation between the use of the suffix *hypo-* and the *aulos*-based approach followed by earlier *harmonikoi* appears in Aristoxenus’ *Elementa Harmonica* (47.1–16 Da Rios), a passage that attacks precisely the haphazard method followed by his predecessors and, significantly, preserves the only occurrence of the suffix *hypo-* to characterise different *tonoi* in genuine Aristoxenian writings. The same conceptual approach informs also the term Hypermixolydian, which indicates a *tonos* whose *mesē* (*c'*) is ‘the next one immediately above’ the Mixolydian (*b'*; if ‘higher’ Mixolydian, *b*—Cleon. 203.7–10 Jan) and not one that is a fourth above it.

88 Poll. 4.65 Λοκρικὴ· Φιλοξένου τὸ εὔρημα.

89 See e.g. Heracl. Pont. *ap.* Ath. 14.625e, who says that the Locrian was employed by contemporaries of Pindar and Simonides; Pind. fr. 140b M. and some scholia to Pindar (*schol. vet.*

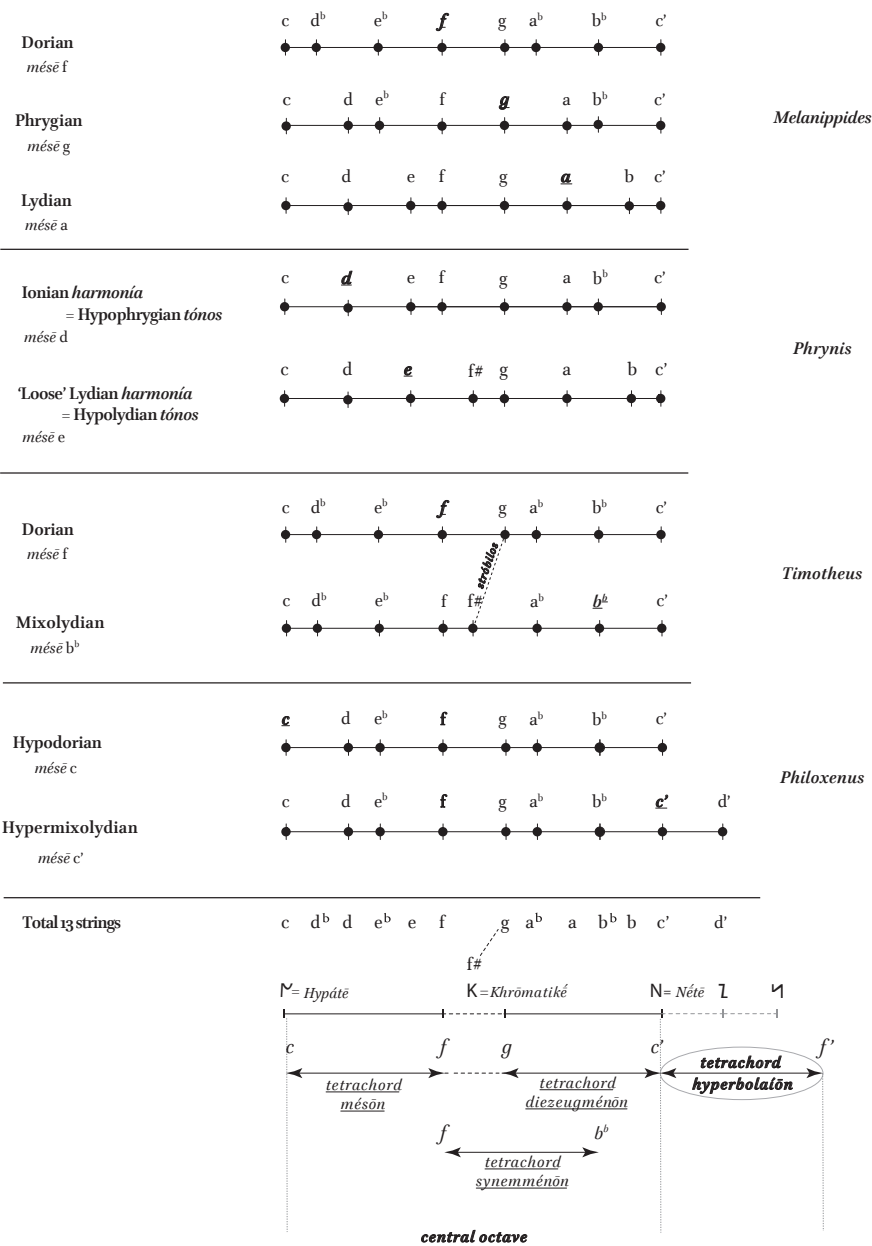


FIGURE 15 Philoxenus' 'hyperbolic' *harmonia*: Hypermixolydian and Hypodorian/Locrian

found out how to integrate the Locrian within the modulating system of lyre *harmoniai*, just as Damon had ‘found’ a way to include the ‘Loose Lydian’.⁹⁰

Secondly, an Aristoxenian fragment preserved once again by Pseudo-Plutarch (1142f) describes in some detail the harmonic progression of one of Philoxenus’ most famous compositions, the *Mysians*, and tells us that the first part of this composition was precisely in Hypodorian/Locrian, the intermediate in Phrygian and Hypophrygian/Iastian, and the closing section in Dorian and Mixolydian.⁹¹ In other words, this dithyramb employed the whole range of the seven *harmoniai* contained in the tuning we have reconstructed on the basis of the Pherecrates fragment, embodying a new apex of musical *paranoia*: moving from the lowest *tonos* (Hypodorian *mesē c*) to the highest one, the Mixolydian (*mesē b^b*) on one and the same instrument.⁹²

Finally, this tuning covers a gamut of a ninth, which corresponds to the range posited for the classical *kithara*⁹³ and, most importantly, comprises 13 *mesai*: that is to say precisely the number of *tonoi* comprised in the Aristoxenian system.

In his seminal monograph on the *Science of Harmonics in Classical Greece*, Andrew Barker highlighted how Aristoxenus, in introducing the topic of *tonoi*, ‘hints at a connection of some sort between them and the *systemata*’ he had previously associated with the ancient *harmoniai*:⁹⁴

O. 10.17k and 18b) ascribe its invention to the seventh-century aulete Xenocritus of Locri (cf. also [Plut.] *Mus.* 1134b-e).

90 Cf. n. 66 above.

91 This passage confirms that, after Timotheus’ unique re-interpretation of the *strobilos* as a tool to ‘loosen’ *paramesē g*, it was not necessary to ‘rectify’ the tuning before the end of the piece, since Dorian *mesē f* was available even when coupled with the Mixolydian mode.

92 In the specific case of the *Mysians*, the instrument should be an *aulos*, not a *kithara*, and this explains why the Hypermixolydian mode is not mentioned: in fact, the extra note *d'* would go above the upper limit of Classical modulating *auloi* (Dorian *nētē c'*, N), i.e. the highest boundary of the Aristides scales (Hagel 2010, 34-8). More generally we know that the ‘New Musicians’ composed both kitharodic *nomoi* and auletic dithyrambs (e.g. Arist. *Poet.* 1448a14f.).

93 Hagel 2010, e.g. 92, 283, 370. The tuning I have reconstructed here is a third lower than Hagel’s—an important difference that I plan to discuss in detail elsewhere.

94 Aristox. *El. harm.* 11.19-12.13, 46.17-20 Da Rios. Cf. Aristid. Quint. *Mus.* 15.19f. (περὶ μὲν οὖν συστημάτων, ἃ καὶ ἀρχαῖς οἱ παλαιοὶ τῶν ἡθῶν ἐκάλουν), 18.5f. (γίνονται δὲ καὶ ἄλλαι τετραχορδικοί διαιρέσεις, αἷς καὶ οἱ πάνυ παλαιότατοι πρὸς τὰς ἁρμονίας κέχρηται), 19.8-10 (τοιαύτας γὰρ ἐπιποιῶντο τῶν ἁρμονιῶν τὰς ἐκθέσεις πρὸς τὰ προκείμενα τῶν ἡθῶν τὰς τῶν φθόγγων ποιότητος ἀρμοττόμενοι), and 22.11-23.6.

‘The fifth part concerns the *tonoi* in which the *systemata* are placed when they occur in melody’ (37.8-10). The remark suggests that the *tonoi* somehow map out pitch-relations between different forms of *systema*, and not merely between thirteen instances of the same type. What connection, then, might there be between differences of *tonos* and differences in the ‘arrangements’, ‘forms’ or ‘species’ of the octave and the other concords? It is an exceedingly difficult issue.

BARKER 2007, 223

If the present reconstruction is not too wide off the mark, Pherecrates’ pointed parody of the New Musicians’ musical *paranomia* provides us with vital evidence to unravel this crucial, if remarkably complex, issue.

By multiplying the number of the *kithara* strings, the New Musicians succeeded in emulating the harmonic flexibility of the *aulos*, and this process went hand in hand with the development of a harmonic theory that could make sense of such a complex system of modulations and incorporate them within the formal constraints of lyre tunings. Combining an auletic, *tonos*-based approach, based on *mesai* set at different pitches, with a lyre-based approach that conceived lyre *harmoniai* as different ‘forms’ (*eidē*) or ‘arrangements’ (*schēmata*) of the octave,⁹⁵ the New Musicians managed to make the *kithara* once again ‘the most polychord instrument’, matching and perhaps surpassing the *aulos*’ astounding *polyphōnia*.

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95 See also Barker 2007, 227: ‘What this suggests is that the Aristoxenian conception of the role of the *tonoi* was essentially tied up, like Ptolemy’s, with their relation to the octave-species’.

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Appendix: Pherecrates' *Chiron*, fr. 155 K.-A.

<ΜΟΥΣ.> Λέξω μὲν οὐκ ὄκουσα· σοί τε γὰρ κλύειν ἐμοί τε λέξαι θυμὸς ἡδονὴν ἔχει.	I shall not speak against my will; for listening will be a pleasure for your spirit, as speaking is for mine.
ἐμοὶ γὰρ ἦρξε τῶν κακῶν Μελανιππίδης, ἐν τοῖσι πρῶτοις ⁹⁶ ὃς λαβὼν ἀνήκέ με χαλαρωτέραν τ' ἐποίησε χορδαῖς δῶδεκα.	Melanippides is the one who started off my troubles: taking me in the first <manners/modes— <i>tropoi</i> ? >, he loosened me up and made me slacker with his twelve strings.
ἀλλ' οὖν ὅμως οὗτος μὲν ἦν ἀποχρῶν ἀνὴρ ἔμοιγε <φαίνεται> ⁹⁷ ~ πρὸς τὰ νῦν κακά. Κινησίας δέ <γ'> ⁹⁸ ὁ κατάρατος Ἀττικός,	Yet all the same, this man was still acceptable for me, at least so it seems to me next to my current pains. But Cinesias, that disgusting Attic chap,

96 ἐν τοῖσι πρῶτοις codd.: ἐν τοῖσι πρῶτος Meineke: τρόποισι πρῶτοις vel πρῶτοις τρόποισι fortasse legendum est, cf. Aristox. *El. harm.* 29.18f. Da Rios.

97 Cf. e.g. Eur. *Ba.* 629.

98 Cf. e.g. Eur. frs 344, 544 K., *Or.* 406 et passim. <μ'> add. Meineke.

ἐξαρμονίους καμπὰς ποιῶν ἐν ταῖς
 στροφαῖς
 <μ>⁹⁹ ἀπολώλεχ' οὕτως, ὥστε τῆς
 ποιήσεως
 τῶν διθυράμβων, καθάπερ ἐν ταῖς
 ἀσπίσιν,
 ἀριστερ' αὐτοῦ φαίνεται τὰ δεξιὰ.
 ἀλλ' οὖν ἀνεκτὸς οὗτος ἦν ὅμως ἐμοί.

Φρυνὶς δ' ἴδιον στρόβιλον ἐμβαλῶν
 τινὰ
 κάμπτων με καὶ στρέφων ὅλην
 διέφθορεν,
 εἰς¹⁰⁰ πέντε χορδαῖς δῶδεχ' ἀρμονίας
 ἔχων.

ἀλλ' οὖν ἔμοιγε χούτος ἦν ἀποχρῶν
 ἀνήρ·
 εἰ γὰρ τι καὶ ἔξημαρτεν, αὐθις ἀνέλαβεν.

ὁ δὲ Τιμόθεός μ', ὦ φιλάτῃ,
 κατορώρυχε
 καὶ διακέκναικ' αἰσχιστα.
 <ΔΙΚ.>Ποῖος οὗτος
 <ὁ> Τιμόθεος; <ΜΟΥΣ.> Μιλήσιός τις
 πурρίας.
 κακά μοι παρέσχευ οὗτος, ἅπαντας οὖς
 λέγω
 παρελήλυθεν, ἄγων ἐκτραπέλους
 μυρμηκιάς.
 καὶ ἐντύχη πού μοι βαδιζούσῃ μόνῃ,
 ἀπέλυσε¹⁰¹ κἀνέλυσε χορδαῖς δῶδεκα.

making ex-harmonic bends at the turn
 between strophes,¹⁰²

destroyed me to such a point that in the
 composition
 of his dithyrambs, just as in shields,

his dexterous tricks appear rather sinister.
 But for all that, this man was still tolerable
 for me.

Phrynis, however, shoved in some 'twister'
 of his own
 and, bending and twisting me, destroyed
 me completely,
 having up to five *harmoniai* in twelve
 strings.

Yet this man too was still passable to me:
 for even if made a mistake, he took it back
 again.

But Timotheus, my dearest friend, was the
 one who
 utterly ruined me and tore me to pieces
 most disgracefully.

[JUSTICE] Who is this Timotheus, then?
 [MUSIC] Some Milesian redhead.

The troubles this man caused me—all the
 others I say
 he surpassed by far, leading his deviant
 ant-hills.

And when, by chance, he found me walk-
 ing on my own,
 he slackened me up and loosened me
 asunder with his twelve strings.

99 ἀπολώλεκέ με οὕτως MSS.

100 εἰς West: ἐν MSS.

101 ἀπέλυσε MSS: ἀπέδυσε Wyttenbach.

102 Cf. Xen. *Eq.* 7.15-7.

καὶ Ἀριστοφάνης ὁ κωμικὸς μνημονεύει
Φιλοξένου καὶ φησιν ὅτι εἰς τοὺς κυκλί-
ους χοροὺς *** μέλη εἰσηνέγκατο. ἢ δὲ
Μουσικὴ λέγει ταῦτα·

Aristophanes too, the comic playwright,
remembers Philoxenus and says that he had
introduced *** melodies into the circular
choruses. Whereas Music says what follows:

ἐξαρμονίους ὑπερβολαίους τ' ἀνοσίους καὶ
νιγλάρους, ὥσπερ τε τὰς ῥαφάνους ὄλην
καμπῶν με κατεμέστωσε.

[with] ex-harmonic, hyperbolic and im-
moral whistly trills, he filled me all up,
like cabbages, of wriggling caterpillars.

καὶ ἄλλοι δὲ κωμωδοποιοὶ ἔδειξαν τὴν
ἀτοπίαν τῶν μετὰ ταῦτα τὴν μουσικὴν
κατακεκερματικῶν.

Other comic playwrights too have put on
display the strangeness of those who
chopped music up in these ways.



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The Delphic Paeans of Athenaios and Limenios between Old and New Music

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Abstract

Currently, there are only 64 extant fragments of ancient Greek music, of which the bulk belongs to imperial times. Thus, the musical evidence for 'New Music', which had its climax in the second half of the 5th century, is limited. Nevertheless, one important observation is possible: fragments from classical times, which belong to antistrophic compositions, use melodies which do not mirror the prosody of the texts and simply repeat the melody of the strophe in the antistrophe. But all fragments in astrophic form have melodies which follow the prosody of the respective texts closely. This overturn is connected with Melanippides, who in the dithyramb replaced the strophic form with the free astrophic form, to the advantage of musical mimesis. Moreover, the polemics of Old Comedy provide evidence for melodic extravagances which depict highlights of the text. The Delphic Paeans are the heirs to these novelties.

Keywords

New Music – Old Music – strophic form – free astrophic form – Melanippides – dithyramb – musical mimesis

1 The Limits of the Musical Fragments

Fragments of ancient Greek music have been transmitted by medieval manuscripts,¹ by inscriptions,² and in most cases by papyri from Ptolemaic to imperial times. The last corpus of 61 items, to which I should like to refer as *DAGM*, was brought together in 2001 by the late M.L. West and myself. In 2004 A. Bélis published a Louvre papyrus of the 2nd century AD, a fragment of Carcinus the Younger (4th century BC).³ In 2005 J. Yuan published a small Oxyrhynchus fragment (no. 4710). And in 2009 M.C. Martinelli published a Vatican papyrus, a strip from Ptolemaic times.⁴ These 64 items are all we have for six centuries.

The musical revolution, which was roused by the so called 'New Music', had its climax in the second half of the 5th century BC. Anyone who tries to find evidence for 'New Music' in the musical fragments will soon discover that the musical fragments are not very helpful, as only three fragments, all from Euripides, can surely be assigned to classical times.

2 Strophic Form and Free Astrophic Form

The oldest musical papyrus (about 250 BC), *DAGM* no. 4, contains two lyric excerpts from *Iphigenia in Aulis* of Euripides (staged 405 BC) in the wrong order: the first (1499-1509) comes from an astrophic lyric dialogue of Iphigenia with the Chorus; the second (784-92) comes from the epode of the second stasimon. Despite the fragmentary condition of the notation it seems that the melody does not mirror the musical accents of the text. *DAGM* no. 2 is a reconstruction of the music of Euripides' *Orestes* vv. 140-2 according to Dionysius of Halicarnassus. His quotation belongs to the *parodos* of *Orestes*, a lyric dialogue of Electra and the Chorus. Dionysius observes that the melody of vv. 140-2 does not follow the musical accents of the words. By transferring his observations to the respective lines of the antistrophe (vv. 153-5) it appears that there is no correspondence of melody and musical accents in the antistrophe either. The same is the case in *DAGM* no. 3, the famous *Orestes Papyrus* (200 BC) of Vienna, vv. 339-44 of the antistrophe of the first stasimon of Euripides' *Orestes*.

1 *DAGM* nos 24-31 (Mesomedes), 32-7 (instrumental pieces). See also *DAGM* no. 2, reconstructed from Dion. Hal. *Comp.* 63f.

2 *DAGM* nos 19-23.

3 Cf. West 2007. For an improved text, see Burkert 2008. Taplin (2014, 151-3) believes, like Bélis, that the sung trimeters of *Medea* could be music of the 4th century BC.

4 Cf. Martinelli and Pintaudi 2009.

The melody transmitted with the antistrophe does not follow the musical accents of the text. It could be proved by peculiarities of the layout of text and musical notation⁵ that the melody transmitted with the antistrophe was simply repeated from the strophe (vv. 322-44), where it does not match the musical accents either.⁶

Three Ptolemaic papyrus fragments (*DAGM* nos. 8-10) and one later example (*DAGM* no. 17), which can be classed with strophic lyrics by content or metrics, disregard the musical accent of the text in the same way. But the overwhelming majority of musical fragments, which belong to hellenistic or imperial times, have melodies which mirror the musical accent accurately, provided that enough text and notation are preserved for observations. In these fragments, strophic form disappears completely. Instead we find the astrophic free form or the simple stichic form. The most conspicuous example for this overturn are the famous Delphic Paeans of Athenaios and Limenios, inscriptions of 128 BC and 106 BC (*DAGM* nos. 20f.). In order to explain this conversion we have to go back to a prominent figure of New Music, Melanippides of Melos and two crucial testimonies about his music: the Pseudo-Aristotelian *Problems* (19.15) connect the abolition of the strophic form in the dithyramb with the trend to more possibilities of expression ('When the dithyramb became imitative, it dismissed the antistrophes, which it formerly had'), and Aristotle in the *Rhetoric* (1409b25) assigns this innovation to Melanippides, who is said to have replaced the strophic structure by *anabolai* (ποιήσαντα ἀντὶ τῶν ἀντιστροφῶν ἀναβολάς), creating in this way the so-called 'New Dithyramb'.

The astrophic style was not limited to the New Dithyramb, but familiar in the later part of the 5th century BC in many genres.⁷ We have an extended example for the *nomos kitharōidikos* in the *Persians* of Timotheus (about 450-360 BC), which were also astrophic and polymetric. In his dithyrambs Timotheus might have used the astrophic free form also.⁸ But the best examples for astrophic and polymetric lyrics can be found in the late monodies of Euripides after 428⁹ and the parodies of these in Aristophanes.¹⁰

The aforesaid isolated remark of Aristotle accompanies a quotation of Democritus of Chios¹¹ attacking Melanippides. It leaves some doubt as to what

5 *DAGM* p. 16 f.

6 *DAGM* p. 13.

7 See West 1982, 135-40, Hordern 2002, 55-60.

8 Cf. Hordern 2002, 17-25, 25-33, 81-98 and commentary.

9 See Pöhlmann 2009, 250-6.

10 See Pöhlmann 2009, 258-71.

11 See Schmid 1946, 124 n. 4, 133 n. 7, 480 n. 4.

Aristotle denotes with ἀντιστροφῶι and ἀναβολαί.¹² But this remark is found at the end of a paragraph (*Rh.* 1409a24-b27) about the continuous style (λέξις εἰρομένη) as opposed to the periodic style (λέξις κατεστραμμένη), the beginning of which makes unmistakably clear what Aristotle means. The continuous style is compared with the ἀναβολαί of the dithyramb, as the respective parts come to an end not by themselves, but only with the content. The periodic style however is compared with the ἀντίστροφῶι of the old poets, as the respective parts have their end in themselves: 'the style must be either continuous like the anabolai in the dithyramb, or periodic, like the antistrophes of the old poets. I call the style continuous which has no end in itself, if not the content itself comes to an end'.

It is obvious that ἀντιστροφῶι in Aristotle's *Rhetoric* denote the antistrophic style generally, namely the pair of strophe and antistrophe together, and not the antistrophe alone. Consequently the ἀναβολαί of Melanippides denote the complete texts of the New Dithyramb, and not only instrumental interludes. Unfortunately there are no extended fragments of Melanippides. But we can study the structure of the astrophic free form in the astrophic polymetric monodies of Euripides, which superseded the strophic monody since his *Hippolytus* (428 BC).¹³ They are arranged in sections of different length by the content, variations of the metre and probably also of the music. The same structure can be seen in the Delphic Paean of Athenaios, performed in 128 BC.

3 Structure of the Paean of Athenaios

The Paean of Athenaios consists of a series of cretics without strophic arrangement. Instead, it falls into four paragraphs of different lengths, which are separated by epigraphical, metrical and musical marks, but also by the content. Thus we have an example of the free astrophic form, which merely is not polymetric. The absence of the strophic arrangement gave Athenaios the possibility to compose a melody for the Paean, which followed the musical accents accurately, except v. 10 (φερόπλοιο).

1. In vv. 1-8, the *epiklēsis*, the Muses are summoned from Helicon, and Apollo from Parnassus to Delphi, where the god arrives after his purification in the spring Castalia. The key used is Phrygian with the steps <d> e♭ g a♭ c' d' e♭' g' a♭' (vv. 1-6) and <d> e♭ g a♭ c' d♭' d' e♭' f' g' a♭' (vv. 6-8). In v. 7 there is modulation to *synēmmenon* with d♭'. The lacking steps f, b♭ and f' give the melody

¹² See West 1982, 138 n. 2.

¹³ Pöhlmann 2009, 250-6.

a pentatonic character, which reminded Winnington-Ingram of the archaic pentatonic trichords of the *spondeion* of Olympus.¹⁴ Paragraph 1 is marked off by line-break and *anceps*. Moreover, the *epiklēsis* is divided into two parts: its melody begins in a middle register, but moves to the highest tetrachord, when the text mentions the residence of Apollo, the high peaks of Parnassus, from which the melody, by the picturesque modulation to *synēmmenon* (v. 7: *db'*) descends to Delphi again.

2. Vv. 9-16 are some kind of *sphragis*: Athenaios describes the offering at the altar of Apollo in Delphi in the presence of the Athenian delegation and the Athenian *τεχνίται*, which sing and accompany the paeon with *auloi* and *kitharra*, while the smell of burning meat and incense rises to Olympus. The key used is chromatic Hyperphrygian with the steps *ab b c' db d eb' f' gb' g' ab'*, enriched by the alien *b* (ten times), modulations to Phrygian (vv. 11 and 13) with *eb'* and modulation with *gb'* to *synēmmenon* (v. 11). Paragraph 2 is marked off by hiatus.

The chromaticism and the modulations in § 2 remind one of the style of New Music, which is revealed in the polemic catchwords of Old comedy,¹⁵ the musical meaning of which nevertheless is difficult to assess. Thus *καμπαί* ('bent', 'deviation') might point to modulations (*ἐξαρμονίους καμπάς*, against Cinesias)¹⁶ or to the melismatic style of the New Music instead of the syllabic style of Old Music.¹⁷ But there is one catchword, *μύρμηκος ἀτραποί* ('ant-tracks'), which can with confidence be identified. In Aristophanes' *Thesmophoriazusae* Euripides announces (vv. 99f.) a song of Agathon, but Mnesilochus hears nothing but whimpering (chromatic) ant-tracks (EYP. *σίγα· μελωδεῖν γὰρ παρασκευάζεται* / MNEΣ. *μύρμηκος ἀτραπούς, ἢ τί διαμινύρεται*). The same catchword reappears in Pherecrates against Timotheus, who introduced 'perverse, exharmonic, high-pitched, wicked ant-tracks' (fr. 155,25f. K.-A. *ἄγων ἐκτραπέλους μυρμηκίας / ἐξαρμονίους ὑπερβολαίους τ' ἀνοσίους*),¹⁸ explained by Düring (1945, 195f.) and Borthwick (1986, 69f.) as a chromatic melismatic figures. In § 2 of Athenaios there are many such figures, the meaning of which we shall explain later.

3. In vv. 16-27, the *aretologia*, the Athenian *τεχνίται* praise the heroic deeds of Apollo: his abilities in prophecy (vv. 19f.), the occupation of the mantic tripod (vv. 21f.) and the killing of Python (vv. 22-4). The last hissings (*συριγμός*) of the dragon were the climax of the *Pythikos Nomos* of the *aulos* player Sacadas,

14 Cf. Winnington-Ingram 1936, 24, 33-5 and Hagel 2002.

15 See Pöhlmann 2011.

16 Pherecr. fr. 155,9 K.-A.

17 See West 1992, 200-4.

18 For the text of Pherecrates' fragment see Pöhlmann 2011, 121-3, where the transposition of vv. 26-28 between vv. 23 and 24 is discussed.

victorious in Delphi in 586, 584 and 582 BC. There follows the defeat of the Gallian invaders in 278 BC (vv. 25-7). The key used is Phrygian, the highest tetrachord of which is chromatic with the steps: *g ab b c' db' d' eb' f' g' ab' a' <c">*, enriched by one alien *b* (v. 23) and modulation (v. 20) with *db'* to *synēmmenon*. The highest tetrachord of the Phrygian key is used for the last hissings of the Python and the defeat of the Gallian invaders. Unfortunately, the *συριγμός* itself is not preserved.

4. The fragmentary vv. 27-34 and fr. 3/4 are the *epilogos*, marked off by ἀλλ' ἰώ γεένναν. Apollo's fighting spirit is mentioned (v. 28 θάλος φιλόμ[αχον]). His help is requested against the disaster of some people (v. 29 δαάμοιο λοι[γόν] by the attack of some enemy (v. 30 ἔχθ[ρ]ων ἐφορμάν). The key used is Phrygian, the highest tetrachord of which is again chromatic. The steps used are *g eb' f' g' ab' a' <c">*.

4 Structure of the Delphic Paean of Limenios (106 BC)

The structure of the Delphic Paean of Limenios is very similar. The main part of it (lines 1-33) consists of a series of cretics without strophic arrangement. Instead, it falls into nine paragraphs of different lengths, which are separated by epigraphical, metrical and musical marks, but also by the content. There follows the *epilogos* (vv. 33-40) in aeolic metres. Again, we have an example of the free astrophic form. The absence of the strophic arrangement gave Limenios also the possibility to compose a melody for the paean, which followed the musical accents accurately, except v. 2 (δικόρυφον). According to Winnington-Ingram (1936, 35-8) the pentatonic character of paragraph 1 of Athenaios reappears in Limenios too.

5 Mimesis in Athenaios and Limenios

According to the Pseudoaristotelian *Problems* (19.15) the dithyramb abolished the strophic form in favour of the free astrophic form because of the trend to more possibilities of expression (μίμησις): οἱ διθύραμβοι, ἐπειδὴ μιμητικοὶ ἐγένοντο, οὐκέτι ἔχουσιν ἀντιστρόφους, πρότερον δὲ εἶχον. This overturn can be seen in other genres too, e.g. in the late astrophic monodies of Euripides and in the majority of the musical fragments, especially in the Delphic paeans of Athenaios and Limenios. Can we find musical mimesis in them?

Of course, the composition of melodies which imitate the musical accent of the respective texts, which is concatenated with the free astrophic (or stichic)

form, is mimetic in itself. But in the Delphic paeans there is more evidence for *μίμησις* of words by music, as West (1992, 200-2, 288-302) has demonstrated. Observations of this sort gain reliability by parallels. Therefore it is advisable to compare respective examples of Athenaios and Limenios. The most impressive examples of musical mimesis are assembled in the appendix.

It leaps to the eye that in both paeans, the two peaks of Parnassus are mirrored in the melody. In Athenaios the passage of Apollo over the two peaks of Parnassus is represented by the melody (example 1), while Limenios depicts the two peaks of Parnassus by two melodic peaks against the accent in *δικόρυφον* (example 2).

In both paeans there are oscillating chromatic phrases which are often connected with the melismatic setting of a long syllable to two notes. These phrases match the aforesaid catchword of Aristophanes and Pherecrates very well, the 'ant-tracks' (*μύρμηκος ἀτραπούς*). In Athenaios they depict the melodies of the *auloi* highlighting *αἰιόλοις* (example 3), in Limenios on *αἰιόλοις* the melodies of the *kithara* (example 4). But these phrases are polyvalent: in Athenaios they also depict *αἰεῖθει*, the flickering flames on the altar (example 5). A kindred figure in Athenaios on *ἀνακίδναται* depicts the smell of incense rising to Olympus (example 6), and the same figure on *ἀναμέλπεται* is used in Athenaios to depict the melodies of the *kithara* and the chorus (example 7). In Limenios we find the same figure on *πετροκατοίχητος* highlighting the song of the nymph echo from her cave in the Athenian *akropolis* (example 8). Unfortunately the climax of the Python story, the *συριγμός*, is preserved neither in Athenaios nor in Limenios. We might guess that the last hissings of the dying dragon were depicted by chromatic and melismatic 'ant-tracks' in the highest tetrachord.

We have seen in example 1 that Athenaios uses bold leaps of an octave upwards to depict the travels of Apollo. Limenios adopts this device on *παῶς δὲ γάθησε* in example 9, where he depicts a leap from earth to the heavens. In example 10 he uses a leap of an octave upwards on *ἐπέβα* to depict the leap of Apollo from Delos to Athens. And in example 11 a leap of a seventh upwards on *βαῖν' ἐπὶ* depicts the leap of the god from Athens to the heights of Parnassus.

Examples for pictorial leaps downwards come only from Limenios, who displays in his § 2 (vv. 8-12) the hieratic motive of the holy silence before the epiphany of a god. The roaring of the winds, the rush of the waves of the sea cease when Apollo, coming from Delos, arrives at Athens. The sudden silence of the winds is depicted by a leap of a ninth downwards on *νηνέμους* (example 12). And the same leap downwards of a ninth on *κατέκτας* symbolizes the killing and the death of the Python (example 13).

6 New Music, Old Music and Athenaios

By the polemics of Old Comedy we realize that the struggle between the adherents of good 'Old Music' and 'New Music' had its climax in the 2nd half of the 5th century. The Aristoxenian passages in Pseudo-Plutarch *De Musica* (chs 17-22) still give evidence for the existence of two rivalling musical schools which advocated for old or new music. But Timotheus already had become a classic and with him the style of his followers, according to West (1992, 372, 381f.). Two centuries later, the struggle was settled. Athenaios followed on the one hand the mainstream of music by using instead of the strophic form the free astrophic form, which was concatenated with melodies following the prosody of the texts. On the other hand, he used the style of New music, its chromatic *melismata*, in order to depict the offering at the altar of Apollo and the music of the Athenian *technitai*, and the device of highlighting meaningful words by *μίμησις*, by pictorial melodic figures in his paragraph 2, while at the same time he felt free to pay honour to the classic status of Old Music, Olympus, by his pentatonic scale in his paragraph 1. Thus Athenaios presents himself as an heir of the musical tradition as far as it was still accessible for him. That this traditionalistic, even antiquarian, approach was wanted by the responsible authorities is attested by the decree of the Athenian demos about the Pythais of 128 BC (the year of the Paean of Athenaios), which approves this approach: ψα[φι] ζαμένου τοῦ δάμου τοῦ Ἀθηναί[ων] πέμπειν τὰν Πυθαΐδα ποθ' ἀμέ ... ταῖς ἱστορίαις [ἀ]κολούθως (SIG³ 698,4ff.).¹⁹

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¹⁹ Cf. Pöhlmann 1960, 59-61.

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Appendix

Mimesis in Athenaios and Limenios



EXAMPLE 1 Athenaios line 4f.



EXAMPLE 2 Limenios line 2



EXAMPLE 3 Athenaios line 14



EXAMPLE 4 Limenios line 16



EXAMPLE 5 Athenaios line 12



EXAMPLE 6 Athenaios line 15



EXAMPLE 7 Athenaios line 16



EXAMPLE 8 Limenios line 17



EXAMPLE 9 Limenios line 8



EXAMPLE 10 Limenios line 13



EXAMPLE 11 Limenios line 22



EXAMPLE 12 Limenios line 9



EXAMPLE 13 Limenios line 22



BRILL

An Experimental Investigation of Rhythmic Irrationality

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Abstract

The present paper investigates ‘rhythmic irrationality’ in the medium of recited ‘word’, as this is defined by Aristoxenos and Dionysios Halikarnasseus in three rhythmic contexts: that of the anapaest, of the dactyl, and of the trochee (*choreios*). For this purpose, computer experiments have been devised, one for each of the aforementioned irrationalities: against the background of a monitored metronome, a line in each rhythm is initially recited in the rational mode. The line is subsequently recited another seven times, with the podic duration which is to suffer diminution or augmentation, in steps of eighths of the time unit. The eight vocal renderings of each line are then assessed psychoacoustically, in order to locate: (a) the point at which our hearing detects the onset of irrationality, and (b) the point at which a shift from the original rhythm to another is sensed.

Keywords

rhythmic theory – rhythmic irrationality – cyclic anapaest – irrational dactyl – *alogos choreios*

1 Rhythmic Rationality¹

It has been established in the scholarship of ancient Hellenic music that a 'simple rational foot' (ῥητὸς ἀσύνθετος/ἀπλοῦς πούς) is defined as the temporal structure²

$$\pi = (X_l: \dot{X}_f) \text{ or } (\dot{X}_l: X_f), \text{ where}^3$$

π stands for simple rational foot;

X_l stands for the 'leading part of the foot' (καθηγούμενος ποδικὸς χρόνος),⁴ hereafter the 'leader', which is a multiple of the 'unit of time' (πρῶτος χρόνος).⁵ Thus, $X_l = kv$ with $k \in \{1, 2, 3\}$, i.e. either 'monoseme', 'diseme' or 'triseeme' (μονόσημος, δίσημος, τρίσημος),⁶ and treated either as 'down/thesis' or 'up/arsis' (κάτω/θέσις, ἄνω/ἄρσις);⁷

X_f stands for the 'following part of the foot' (ἐπόμενος ποδικὸς χρόνος),⁸ hereafter the 'follower', also a multiple of the unit of time, $X_f = kv$ with $k \in \{1, 2, 3\}$, and treated as either thesis or arsis, too;

1 It is with sincere gratitude that the present paper is dedicated to the memory of Ellen Hickmann, the gentle and visionary woman who ushered me, as a young scholar, to the academia of archaeomusicologists, deep in the almost fairy-tale, βαθύδενδρον forest of idyllic Michaelstein, where a new generation of enthusiastic music archaeologists of the world had the luck to mingle, talk, exchange ideas, and make unorthodox music. What a nursery that was, and how fruitful it proved to be. Ellen Hickmann has definitely earned a special place in my heart; S. Psaroudakēs.

2 See Aristox. *Rhyth.* 17, 10.23-6 Pearson; Aristid. Quint. 1.14, 33.12-13 W.-I.

3 A more comprehensive definition of the simple rational foot could be expressed by the equation $\pi = (X_l: X_f^*)$, the asterisk signifying the 'opposite passion' of the podic duration bearing it to the other podic duration; if X be the arsis, then X^* is the thesis, and vice versa.

4 See Aristid. Quint. 1.14, 33.27-8 W.-I.

5 See Aristid. Quint. 1.14, 33.27-8 W.-I. The unit of time is every time established 'metronomically'.

6 See Aristox. *Rhyth.* 10, 6.22-6 Pearson. The standard symbols used to represent rational temporal values are: v , $-$, — , ⌌ , ⌌⌌ , for the monoseme, diseme, triseeme, tetraseme, and pentaseme magnitudes, respectively, according to *Anon. Bell.* 1.1, 1.1-8 and 111.83, 28.1-7 Najock. The reader must bear in mind that the above symbols always represent durations, that is temporal rational magnitudes, and not (prosodic) syllabic quantities, 'short' and 'long', which are here indicated by the symbols σ and Σ , respectively. The mathematical expression $k \in \{1, 2, 3\}$ is read 'number k belongs to the set 1-2-3', that is, k can be either 1, or 2, or 3.

7 Ἄνω and κάτω in Aristox. *Rhyth.* 17, 10.23-6 Pearson; cf. Pl. R. 400b. Θέσις and ἄρσις in Aristid. Quint. 1.14, 33.12-13 W.-I.

8 See Aristid. Quint. 1.14, 33.28 W.-I.

The double dot (:) marks the transition from leader to follower, essentially from one temporal ‘passion’ (πάθος) to the other,⁹ that is from thesis to arsis and vice versa, and indicates the acceptable, ‘rhythmical’ ratio, which *must* exist between the two parts of the foot (1:1, 1:2/2:1, 2:3/3:2),¹⁰ in order for the foot, and the ensuing rhythm, to be ‘in rhythm’ (ἔνρυθμος, ἔρρυθμος, εὐρυθμος);¹¹

The dot (·) (στιγμή)¹² marks the up, its absence indicating the opposite passion, down.

It must be pointed out that, although *k* can take any value between 1, 2, and 3, the whole of a ‘primary foot’ (πρῶτος πούς)¹³ cannot exceed the pentaseme magnitude.¹⁴

By arsis (up) is meant the sensation created in the performer and in the listener of a ‘preparation of what is to follow’, which ‘flows into’, so to speak, the thesis. The succession of ‘downs’ during the execution of a melody is not necessarily audible to the listener as occasions of stress, especially in lesser rhythmical melodies or in slower tempi.¹⁵ In some way, the arsis prepares the thesis,

9 Arsis and thesis, together with ‘sound’ (ψόφος) and ‘silence’ (ἡρεμία), are classified as ‘passions of durations’ (χρόνων πάθη) by Aristid. Quint. 1.13, 31.8–14 W.-I. Cf. Barker 1989, 434 n. 155. Alternatively, Aristides (14, 33.13 W.-I.) refers to them as either ‘parts’ (μέρη) of the foot.

10 The ratios correspond to the three ‘rhythmic genera’ (ῥυθμικά γένη): the dactylic (δακτυλικόν) in ‘equal ratio’ (ἴσος λόγος), the ‘iambic’ (ιαμβικόν) in ‘double ratio’ (διπλάσιος λόγος), and the ‘paeonic’ (παιωνικόν) in ‘hemiolic ratio’ (ἡμιόλιος λόγος), respectively. See Aristox. *Rhyth.* 17, 10.23–6 and 24, 16.1–3 Pearson; Aristid. Quint. 1.14, 33.29–30 W.-I.

11 Εὐρυθμος in Aristox. *Rhyth.* 7, 4.22, 24 and 8, 6.11 Pearson; ἔνρυθμος in Aristox. *Rhyth.* 32, 18.3 Pearson; ἔρρυθμος in Aristox. *Rhyth.* 33, 34, 35 (18.8, 13, 18 Pearson). The double dot is not an ancient rhythmical sign. It is here introduced as a diacritic of separation between up and down, and also as a reminder that a certain ratio must exist between these two temporal magnitudes in the case of a rational foot.

12 See Anon. *Bell.* 1.3, 2, 111.85, 28 Najock.

13 Every rhythmic genus has its primary foot: the triseme (2:1/1:2) in the iambic, the tetraseme (2:2) in the dactylic, and the pentaseme (3:2/2:3) in the paeonic. According to Psellos, *Introduction to the study of rhythm* 12, 24 Pearson, τῶν δὲ τριῶν γενῶν οἱ πρῶτοι πόδες ἐν τοῖς ἑξῆς ἀριθμοῖς τεθήσονται· ὁ μὲν ἱαμβικός ἐν τοῖς τρισὶν πρῶτοις, ὁ δὲ δακτυλικὸς ἐν τοῖς τέταρτιν, ὁ δὲ παιωνικός ἐν τοῖς πέντε.

14 Not taken into account here are the heptaseme feet of the controversial epitritic ratio (4:3/3:4), and feet such as the octaseme ‘double/major spondee’ (διπλοῦς/μείζων σπονδαίος) (4:4), the decaseme ‘paeon epibatos’ (παίων ἐπιβατός) (2:2 ∫ 4:2)—conceivably (– ∙ ∫ – – ∙)—, the dodecaseme ‘orthios’ (ὄρθιος) (4:8) and ‘trochee semantos’ (τροχαῖος σημαντός) (8:4). On these feet, categorized under ‘simple feet’, see Aristid. Quint. 1.15–16, 35–7 W.-I. For further discussion on these four feet, see West 1992, 156f.

15 Cf. Silva-Barris (2011, 21–3) for a discussion of the issue of *ictus* in ancient recitation.

like the raising of our foot in dance is followed by its subsequent stepping down, or the swelling of a sea wave is released in its dissolution. Therefore, the ancient practice of marking the arsis with the dot is very logical, since *this* is the part which is envisaged by the performer as a preparatory rhythmic event, leading onto the thesis.¹⁶

The belief of some scholars that there is a difference between ‘metrical’ and ‘rhythmical’ rhythm should not be endorsed. There can only be one rhythm, one, singular sense of rhythm, and this employs by necessity the application of arseis and theseis, at least in the mind of the performer, otherwise he/she cannot realize the melodic phrase.¹⁷ If metricians were right in their definition of rhythm in the medium of lexis, there would have been no need for Aristoxenos to include lexis as a ‘rhythmizable’ (ῥυθμιζόμενον) in his rhythmic theory.¹⁸

All this information is brought together in the following table, which contains the relevant eponymous simple and rational feet in each category given by our sources:

$(X_1:X_f)$	$(X_1:\dot{X}_f)$	exemplars	$(\dot{X}_1:X_f)$	exemplars
2:2	2:2̇	(– ùù) dactyl (δάκτυλος) ^a (– : –) spondee (σπονδεῖος) ^c (υυ ùù) double pyrrhic (πυρρήχιος διπλοῦς) ^d	2̇:2	(ùù –) anapaest (ἀνάπαιστος) ^b (ùù υυ) double pyrrhic (πυρρήχιος διπλοῦς) ^b
1:2	1:2̇		1̇:2	(ù –) iamb (ἰαμβος) ^e
2:1	2:1̇	(– ù) <i>trochee</i> (τροχαῖος) ^f	2̇:1	
2:3	2:3̇	(– ù –) paeon diagyios (παίων διάγυιος) ^g	2̇:3	

16 Cf. Lynch 2016, 5: “Arseis had greater rhythmical importance than theseis”.

17 In the absence of stress at downbeats, there are other ways in which the theseis of the score are generated by the player and communicated to the listeners: anticipation, timbral variation, intonation adjustments, presence of melodic peaks or valleys, harmonic progressions, etc., which create what music psychologists call ‘accent’. Thus, even in harpsichord or organ music, where it is beyond the capability of these instruments to alter their dynamics, ‘phenomenal accents’ on the downbeats *are* created by the players, and are perceived as such by the listeners (Drake and Parncutt 2001). “Agogic accents can tell the listener where to hear the downbeat of the bar” (Sloboda 1983). “Performances tend to be easier to understand, remember and reproduce when performed accents correspond to immanent accents” (Drake, Dowling and Palmer 1990-91; Clarke 1992-93; Tekman 1996-97).

18 See Aristox. *Rhythm.* 9, 6.16-17 Pearson.

TABLE (cont.)

$(X_1:X_f)$	$(X_1:\dot{X}_f)$	exemplars	$(\dot{X}_1:X_f)$	exemplars
3:2	3:2̇		3̇:2	
a		Aristid. Quint. 1.15, 35.8-9 W.-I. This podic form is called by Aristides an 'anapaest of long thesis and two short arseis' (ἀνάπαιστος ἀπὸ μείζονος ἐκ μακρᾶς θέσεως καὶ δύο βραχυειῶν ἄρσεων).		
b		Aristid. Quint. 1.15, 35.10-11 W.-I.		
c		Aristid. Quint. 1.15, 35.11-12 W.-I.		
d		Aristid. Quint. 1.15, 35.7-8 W.-I. Aristides here gives the alternative name of the foot, 'double prokeleumatic' (προκελευματικός διπλοῦς).		
e		Aristid. Quint. 1.16, 36.2 W.-I.		
f		Aristid. Quint. 1.16, 36.2-3 W.-I.		
g		Aristid. Quint. 1.16, 37.6-7 W.-I. On the controversy, whether Aristides' description of the <i>paion diagyios</i> is to be interpreted as (– ù ÷) or (– ù ÷̇), see Barker 1989, 441 n. 199.		

The simple foot is, so to speak, the 'nucleus' of rhythm: identical or different in one way or another, feet may combine to form larger feet, called either 'composite' feet (σύνθετοι πόδες) or 'mixed' feet (μικτοὶ πόδες): $\Pi = (\pi_1 \int \pi_2 \int \dots \int \pi_n)$, where n is a small integer.¹⁹ Although a composite foot is defined as a sequence of simple feet of *different* genus,²⁰ all examples of composite feet supplied by our sources employ simple feet of the *same* genus. Thus, If the constituent feet are only two ($\pi_1 \int \pi_2$), and of the same genus—but not necessarily of the same magnitude (μέγεθος)—then the composite foot is called a 'syzygy' (συζυγία). Examples are: the 'major Ionic' (ἰωνικός ἀπὸ μείζονος), comprising a tetraseme spondee and a diseme pyrrhic (– ÷̇ \int ù ÷̇); the 'minor Ionic' (ἰωνικός ἀπ' ἐλάσσονος), having the previous two feet in reverse order (ù ÷̇ \int – ÷̇);²¹ the 'first bacchic' (βακχείος πρῶτος/βακχείος ἀπὸ ἰάμβου), made up of an iamb and a trochee (ù – \int – ÷̇); the 'second bacchic' (βακχείος β' /βακχείος ἀπὸ τροχαίου), with the trochee coming first and the iamb second (– ÷̇ \int ù –).²² As regards mixed feet, although they are defined as metrical units, which can be interpreted either as sequences of simple *feet*, or as conglomerates of simple *durations*,²³ all examples of mixed feet supplied by our sources employ simple feet, which

19 The symbol \int is not an ancient rhythmical sign. It has been introduced here for the sake of representing feet junctions, so that the brackets (...) will still signify the limits of a foot, whether simple, composite, or mixed. See Aristid. Quint. 1.14, 34.19-35.2 W.-I.

20 Aristid. Quint. 1.14, 34.19-21 W.-I.

21 Aristid. Quint. 1.15, 35.13-17 W.-I.

22 Aristid. Quint. 1.16, 36.6-8 W.-I.

23 Aristid. Quint. 1.14, 34.22-4. Cf. Barker 1989, 439 with n. 183.

exhibit at least two different genera between them. Examples are: the ‘first dochmiac’ (δόχμιος πρώτος), bringing together a triseme iamb and a pentaseme *paiōn diagyios* (ῥ – ∫ – ῥ – ∫ – ∫ – ∫ – ∫ – ∫);²⁴ the ‘second dochmiac’ (δόχμιος δεύτερος), with an intervening dactyl (ῥ – ∫ – ῥ – ∫ – ∫ – ∫ – ∫ – ∫ unspecified paeon);²⁵ the ‘first prosodiac’ (προσοδιακός διὰ τριῶν), beginning with a simple pyrrhic, followed by an iamb and a trochee (ῥ – ∫ – ∫ – ∫ – ∫ – ∫ – ∫ – ∫); the ‘second prosodiac’ (προσοδιακός διὰ τεσσάρων), with an added iamb in the beginning (ῥ – ∫ – ∫ – ∫ – ∫ – ∫ – ∫ – ∫); the ‘third prosodiac’ (προσοδιακός ἐκ δύο συζυγιῶν), comprising an iamb, a trochee, a spondee, and a simple pyrrhic (ῥ – ∫ – ∫ – ∫ – ∫ – ∫ – ∫ – ∫).²⁶

2 Temporal Irrationality

Besides these ‘rational’ feet (simple, syzygies, mixed), there exist ‘irrational’ varieties of some, at least, of the above simple rational feet. Three such instances are mentioned in our sources: the ‘cyclic anapaest’ (κυκλικὸς ἀνάπαιστος), the ‘irrational dactyl’ (ἄλογος δάκτυλος),²⁷ and the ‘irrational trochee/choreios’ (ἄλογος χορείος).²⁸ Three phrases in the ‘rhythmizable medium’ of ‘word’ (λέξις),²⁹ which are offered by our sources as examples of employment of irrational feet, will be examined in the present investigation, however only in the mode of ‘recitation’ (ῥυθμὸς μετὰ λέξεως μόνης).³⁰

24 Aristid. Quint. 1.17, 37.14-16 W.-I. On the controversy, whether Aristides’ description of the *paiōn diagyios* is to be interpreted as (– ῥ – ∫) or (– ῥ – ∫ – ∫), see Table above, n. g.

25 Very probably, a *paiōn diagyios*, again.

26 Aristid. Quint. 1.17, 37.19-23 W.-I. Mathiesen (1999, 342) confuses composite (he calls them “complex”) with mixed feet, attributing the examples given of the latter type to the former one.

27 Although the epithet *alogos* is not provided by Dionysios in the case of the dactyl, this is here included for completeness, and in need of a word differentiating the two types of dactyl.

28 Strong scepticism has been expressed over the existence of the irrational dactyl and anapaest, as described by Dionysios Halikarnasseus. Rossi (1963, 54) finds it unnatural to have an irrationality in the thetic part of a foot. In support of his opinion, he points out (50) that Aristoxenos’ *alogia* occurs in the arsis of the *choreios*. He is, therefore, of the opinion that corruption has occurred along the transmission line of Aristoxenean rhythmic theory, and names the συμπλέκοντες as the possible culprits (54). However, we accept Dionysios’ testimony for the purposes of our experiment, in order to assess the plausibility of the existence of irrational dactylic feet from a different angle.

29 On the three musical rhythmizable media (word/λέξις, tone/μέλος, bodily movement/σχήματα), see Aristox. *Rhyth.* 3-6, 9 (2.9-4.18, 6.15-21 Pearson).

30 See Aristid. Quint. 1.13, 31.29-32.2 W.-I. It must be stressed that recited word is the opposite of sung word, irrespective of the presence or not of metre, as the vocal chords in each case operate, so to speak, in a different mode. Aristoxenos clearly distinguishes between

2.1 *Irrational Anapaest*

Dionysios Halikarnasseus,³¹ in his discussion of the durational patterns of words, introduces the anapaest, which he defines as the trisyllabic pattern (sss) starting with two short syllables (σςς).³² As is known from elsewhere, the here unspecified third syllable is a long one (Σ). Hence, the foot can be written in the form (σσΣ). The character of this metrical foot is described as ‘most chaste’ (σεμνότητα ἔχει πολλήν), and it is deemed most appropriate in circumstances where a kind of ‘grandeur’ or ‘passion’ is to be expressed (ἔνθα δὲ μέγεθός τι περιτιθέναι τοῖς πράγμασιν ἢ πάθος, ἐπιτήδειός ἐστι παραλαμβάνεσθαι). The example he gives is a line from Euripides’ *Hippolytos* (201), where Phaidra asks her attendants to undo her tight hairband, and let her hair loose:

Βα-ρύ μου κε-φα-λῆς ἐ-πί-κρα-νον ἔ-χειν
(σ σ Σ) (σ σ Σ) (σ σ Σ) (σ σ Σ)

Heavy is my head from the head band

Dionysios informs us that, when it comes to allotting durations to the syllables, metricians and rhythmicians disagree between themselves: metricians perceive the durations of the long syllables (Σ) as diseme (–, μακρὰ τελεία), while rhythmicians detect durations smaller than the diseme at the long syllables. This ‘shortening’, so to speak, of the disemes is said by the rhythmicians to be of unmeasurable magnitude, and that is why they call the ‘squashed diseme’ an ‘irrational long’ (–, μακρὰ ἄλογος). In their view, anapaestic phrases in the medium of lexis (at least), should be distinguished from proper, rational ones. That is why rhythmicians give the ‘squashed’ version a special name: ‘cyclic anapaest’ (κυκλικὸς ἀνάπαιστος). And here Dionysios quotes the line, which, as he says, rhythmicians often bring up as a select example, in order to convince their audiences:³³

the former, which he calls ‘continuous’ (συνεχής, λογική), and the latter, which he terms ‘melodic and intervallic’ (διαστηματική, μελωδική); Aristox. *Harm.* 1.10, 15.3–5 Da Rios. Cf. Silva-Barris (2011, 13f.), where the relationship between song and recitation is discussed, without, however, drawing a clear line between the two modes of word delivery.

31 *Comp.* 17, 2.128 Usher.

32 Throughout this paper, ‘s’ stands for ‘syllable’ in general, σ for a short syllable, and Σ for a long one.

33 *Fragmenta Adespota* 111 Bergk (= 141 Nauck = 1027e *PMG*). West (1992, 136) proposes Stesichoros as the author of the line, “whose lengthy narrative songs were very epic in character, and who made much use of ... υυ–υυ–υυ... sequences”. The feet appear above in the ‘rhythmical’ version, with ‘dots’ (*stigmai*) over the ‘upbeats’ (*arseis*).

($\dot{\upsilon}$ $\dot{\upsilon}$ \sim) ($\dot{\upsilon}$ $\dot{\upsilon}$ \sim) ($\dot{\upsilon}$ $\dot{\upsilon}$ \sim) ($\dot{\upsilon}$ $\dot{\upsilon}$ \sim)	rhythmicians	$\sim < -$
($\dot{\upsilon}$ $\dot{\upsilon}$ $-$) ($\dot{\upsilon}$ $\dot{\upsilon}$ $-$) ($\dot{\upsilon}$ $\dot{\upsilon}$ $-$) ($\dot{\upsilon}$ $\dot{\upsilon}$ $-$)	metricians	
Κέ-χυ-ται πό-λις ὕ-ψί-πυ-λος κα-τὰ γᾶν		
(σ σ Σ) (σ σ Σ) (σ σ Σ) (σ σ Σ)		

Fallen to the ground is the city of the high gates

It is unfortunate that Dionysios stops the discussion on anapaestic irrationality at that point, contented to just say that ‘the matter would demand special treatment’ (περὶ ὧν ἂν ἕτερος εἴη λόγος). However, he gives us a last bit of information: that the cyclic anapaest is a rhythm ‘of a very beautiful kind’ (πάνυ καλός).³⁴

The first question that springs to mind is: which comes first, the syllables or the durations? That is, is the *alogia* a product of recitation, or a product of enforced irrational durations on the words? Although it is not easy to answer such a question, since we are not native speakers, and have not been brought up in the sound aesthetic of ancient poetic diction, we would be inclined to assume, along with other scholars in the past and present,³⁵ albeit with some hesitation, that it is the enunciation of the words which causes the temporal shortening of the long syllables, and not the opposite. The claim could be supported by saying that, in light of the existence of a rational anapaest alongside an irrational variety, the imposition of diseme values on the long syllables would have been an easy task. Therefore, it must have been the prosody of long syllables, the linguistic aesthetic, which demanded a shorter, ‘disemoid’ duration.³⁶

The next question which poses itself is: is this disemoid to be found at every foot? Do all four feet end with a disemoid? Of course, it goes without saying that the ‘load’ (δύναμις) of each long syllable would be responsible for variation amongst the disemoids at the ends of the feet.³⁷ However, they would all be shorter than the diseme; that much they would have in common. An answer to

34 Transl. Usher 1985, 2. 128. Marchetti (2009, 199) accepts rhythmic irrationality as part of musical practice. Contra Pearson (1990, 61) and Gibson (2005, 95).

35 E.g., Rossi (1963, 73-5), who concluded that Dionysios’ remarks refer to specific phonetic qualities of the lines he gives as examples, which makes syllables flow more easily, thus reducing the time associated with each.

36 In the absence of a useful, linguistically economical word to describe the ‘compressed’ diseme, the term ‘disemoid’ is here introduced for the purpose. By the same logic, the term ‘monosemoid’ will later be employed for the ‘dilated’ monoseme.

37 On syllabic *dynamis* see Aristid. Quint. 1.21, 41.19-20 W.-I. Barker (1989, 446.20f.) renders *dynamis* as ‘value’.

this question is of paramount importance, since some modern theorists tend to believe that *alogia* is a local rhythmic event in lexical (at least) phrases.³⁸ For the purposes of our experiment, however, we will give all four long syllables in the line the same time value. We will begin by rendering the line in rational anapaests, and we will then proceed to shorten all disemes in the feet by eighths of the unit of time ($v/8$). It is a multi-purpose experiment, done with the aid of a computer, utilizing the programme 'Cubase Edition 9 Professional'. Firstly, we would like to satisfy our curiosity as to how a 'squashed' anapaestic line would sound; secondly, to locate the point at which our ear actually begins to perceive the shortening of the long syllables; thirdly, to investigate whether there is a limit to shortening the long syllables, beyond which we begin to lose the feeling of the anapaestic rhythm. Essentially, this is an experiment in psychoacoustics of rhythm. For all eight steps of the experiment, the metronome was set at $v = 220$ pulses/min.³⁹

		\dot{v} \dot{v} $-$
0. rational anapaest	$(\dot{v}\dot{v} -)$,.....
1. irrational anapaest	$(\dot{v}\dot{v} \sim) = (\dot{v}\dot{v} - -1v/8)$,.....
2. irrational anapaest	$(\dot{v}\dot{v} \sim) = (\dot{v}\dot{v} - -2v/8)$,.....
3. irrational anapaest	$(\dot{v}\dot{v} \sim) = (\dot{v}\dot{v} - -3v/8)$,.... ← lim. rat.
4. irrational anapaest	$(\dot{v}\dot{v} \sim) = (\dot{v}\dot{v} - -4v/8)$,..
5. irrational anapaest	$(\dot{v}\dot{v} \sim) = (\dot{v}\dot{v} - -5v/8)$,.

38 Marchetti (2009, 200), in discussing dactylic irrationality, is of the opinion that Dionysios' remarks should not be taken as testimony that all dactyls in hexameters were pronounced with a slightly contracted first long syllable, and this view is in fact shared by West (1982, 20), who, further on (n. 86), reaffirms his position, that Dionysios did not intend his comments to apply to all six metres of the dactylic line. If we were to accept this opinion, namely, that only occasionally in the line long syllables were rendered in disemoids, it would be hard to understand why the irrational anapaest was named 'cyclic'. However, West (1992, 136 n. 18) draws attention to the explicit statement made by Dionysios, that, in the case of dactyls, the feet 'have irrational syllables mixed in with them [= the feet]', so that some of them [= dactyls] do not differ much from trochees' (οἱ δ' ἄλλοι πάντες εἰσὶ δάκτυλοι, καὶ οὗτοι παραμειγμένους ἔχοντες τὰς ἀλόγους, ὥστε μὴ πολὺ διαφέρειν ἐνίους τῶν τροχαίων); Dion. Hal. *Comp.* 20, 162-3 Usher. Silva-Barris (2011, 105), in discussing anapaestic irrationality, takes the position that "it is not unthinkable that some syllabically anapaestic passages from the archaic and classical texts were κυκλικοί", although he seems to favour the possibility "that this was a peculiar rhythmic type of the post-classical period".

39 Where the computer programme showed phase differences between voice and metronome larger than 20 milliseconds—the average acoustic threshold, below which human ears do not normally detect differences in time durations—the discrepancies were leveled out, so that voice and metronome were synchronized, at least, at the onsets of feet.

6. irrational anapaest	$(\dot{u}\dot{u} \sim) = (\dot{u}\dot{u} - 6v/8)$ ← lim. anap.
7. irrational anapaest	$(\dot{u}\dot{u} \sim) = (\dot{u}\dot{u} - 7v/8)$
8. tribrach	$(\dot{u}\dot{u} \dot{u})$

No shortening of the diseme is observed in cases 0, 1, and 2, when we listen only to the beating of the metronome. However, when the voice comes in, case 3 could still be felt as rationally anapaestic (upper band). We are certainly aware of the change beyond case 3, but we still feel that the rhythm remains more or less in the anapaestic realm (middle band). However, when we reach case 6, tribrachs are clearly heard (lower band). Therefore, we conclude that, at least in our ears, a change from rationality to irrationality is not perceptible in anapaestic recitation before stage 3, that is before the diseme is reduced by $3v/8$, which is about 37.5% of the time unit (from $v = 100\%$ to $v = 62.5\%$). If the ancient ears had the same sensitivity as ours, then it would be logical to stipulate that the anapaestic disemoid was shorter than the diseme by at least 3 to $4v/8$, and, perhaps, not shorter than that. A comparison between the rational rendering of the line and irrational version 3 or 4, makes us understand immediately, why it is that the epithet ‘cyclic’ was attached to the irrational anapaest: it feels more ‘hasty’, more ‘pushy’, more ‘forward moving’, more ‘rounded up’ than the rational form; it also makes us feel that the tempo has quickened.

2.2 *Irrational Dactyl*

Dionysios provides us with a second example of an irrational foot, an irrational version of the dactyl.⁴⁰ In his discussion of trisyllabic words (sss), after having introduced the tribrach pattern ($\sigma\sigma\sigma$), the molottos ($\Sigma\Sigma\Sigma$), the amphibrach ($\sigma\Sigma\sigma$), and the anapaest ($\sigma\sigma\Sigma$), he comes to the dactyl ($\Sigma\sigma\sigma$), which he characterizes as ‘very modest’ ($\pi\acute{\alpha}\nu\upsilon$ σεμνός), and a notable contributor of beauty to diction ($\epsilon\acute{\iota}\varsigma$ τὸ κάλλος τῆς ἐρμηνείας ἀξιολογώτατος). The dactyl has a special place in the ‘heroic metron’, where it creates lines of six dactyls, the well-known dactylic hexameters. The example he gives is a line from the *Odyssey* (9.39):

Ἴ-λι-ό-θεν με φέ-ρων ἄ-νε-μος Κι-κό-νεσ-σι πέ-λασ-σεν
 (Σ σ σ) (Σ σ σ) (Σ σ σ) (Σ σ σ) (Σ σ σ) (Σ Σ)

From Ilion having borne me the wind to the Kikones brought me

⁴⁰ *Comp.* 17, 2.128 Usher. Marchetti (2009, 199) applies the term ‘cyclic’ also to the irrational dactyl, although this does not result from Dionysios’ text. West (1992, 135f.) correctly allocates the term cyclic to the irrational anapaest alone.

Again, we are told that the durations of the long syllables are differently perceived by metricians and rhythmicians, as regards their temporal magnitude: metricians see a diseme where rhythmicians hear a shorter length, a disemoid.

$(\sim \acute{\upsilon} \acute{\upsilon}) (\sim \acute{\upsilon} \acute{\upsilon}) (\sim \acute{\upsilon} \acute{\upsilon}) (\sim \acute{\upsilon} \acute{\upsilon}) (\sim \acute{\upsilon} \acute{\upsilon}) (\sim \acute{\cdot})$	rhythmicians
$(- \acute{\upsilon} \acute{\upsilon}) (- \acute{\upsilon} \acute{\upsilon}) (- \acute{\upsilon} \acute{\upsilon}) (- \upsilon \acute{\upsilon}) (- \acute{\upsilon} \acute{\upsilon}) (- \acute{\cdot})$	metricians
Ἰ-λι-ό-θεν με φέ-ρων ἄ-νε-μος Κι-κό-νεσ-σι πέ-λασ-σεν	
$(\Sigma \sigma \sigma) (\Sigma \sigma \sigma) (\Sigma \sigma \sigma) (\Sigma \sigma \sigma) (\Sigma \sigma \sigma) (\Sigma \Sigma)$	

Although Dionysios earlier gave us one line in rational anapaests and another in cyclic anapaests, suggesting that both renderings might exist alongside one another,⁴¹ he does not do the same with the dactyl; he gives only one line, and all he seems to imply is that the same dactylic hexameter line is differently described rhythmically by metricians and by rhythmicians, that the same rendering was perceived differently by each group, and not that dactylic hexameters were rendered differently by the two groups. In other words: our problem is not one of rhythmic delivery, but of interpretation of the *same* delivery—difference in theory, not in praxis; in perception, not in performance. We shall, therefore, assume that this was the case, and proceed to do another experiment, along the lines of the previous one.⁴² The metronome was set, again, at $\upsilon = 220$ pulses/min:

			$- \quad \acute{\upsilon} \quad \acute{\upsilon}$
0. rational dactyl	$(- \acute{\upsilon} \acute{\upsilon})$		$ \dots\dots, \dots\dots \dots\dots \dots\dots $
1. irrational dactyl	$(\sim \acute{\upsilon} \acute{\upsilon}) = (- -1\upsilon/8 \acute{\upsilon} \acute{\upsilon})$		$ \dots\dots, \dots\dots \dots\dots \dots\dots $
2. irrational dactyl	$(\sim \acute{\upsilon} \acute{\upsilon}) = (- -2\upsilon/8 \acute{\upsilon} \acute{\upsilon})$		$ \dots\dots, \dots\dots \dots\dots \dots\dots $
3. irrational dactyl	$(\sim \acute{\upsilon} \acute{\upsilon}) = (- -3\upsilon/8 \acute{\upsilon} \acute{\upsilon})$		$ \dots\dots, \dots\dots \dots\dots \dots\dots $
<hr/>			
4. irrational dactyl	$(\sim \acute{\upsilon} \acute{\upsilon}) = (- -4\upsilon/8 \acute{\upsilon} \acute{\upsilon})$	lim.rat. →	$ \dots\dots, \dots\dots \dots\dots \dots\dots $
5. irrational dactyl	$(\sim \acute{\upsilon} \acute{\upsilon}) = (- -5\upsilon/8 \acute{\upsilon} \acute{\upsilon})$		$ \dots\dots, \dots\dots \dots\dots \dots\dots $
6. irrational dactyl	$(\sim \acute{\upsilon} \acute{\upsilon}) = (- -6\upsilon/8 \acute{\upsilon} \acute{\upsilon})$		$ \dots\dots, \dots\dots \dots\dots \dots\dots $
<hr/>			
7. irrational dactyl	$(\sim \acute{\upsilon} \acute{\upsilon}) = (- -7\upsilon/8 \acute{\upsilon} \acute{\upsilon})$	lim. dact. →	$ \dots\dots, \dots\dots \dots\dots \dots\dots $
8. tribrach	$(\upsilon \acute{\upsilon} \acute{\upsilon})$		$ \dots\dots \dots\dots \dots\dots $

⁴¹ So West 1992, 136.

⁴² Silva-Barris (2011, 62-3) is sceptical about giving absolute credit to Dionysios, that all six long syllables in the line should be given a disemoid duration. However, he is prepared to allow for “some, or even the majority”, on the grounds, mainly, that a dactylic line with all its metra irrational cannot convey the *semnon ēthos* which is associated with the hexameter. Cf. n. 43 above.

When only the metronome is beating, we detect no shortening of the diseme in cases 0, 1, and 2. However, when the voice comes in, case 3 could still be felt as rationally dactylic (upper band). We are certainly aware of the change beyond case 3, but we still feel that the rhythm remains more or less in the dactylic frame (middle band). However, when we reach case 6, tribrachs are clearly heard when listening to the metronome alone, but still a dactyl in the voice (lower band). Therefore, we conclude that, at least in our ears, a change from rationality to irrationality is not perceptible in dactylic recitation before stage 3, that is before the diseme is reduced by $3v/8$, which is about 37.5% of the time unit (from $v = 100\%$ to $v = 62.5\%$). If the ancient ears had the same sensitivity as ours, then it would be logical to stipulate that the dactylic disemoid was shorter than the diseme by at least 3 to $4v/8$, and, perhaps, not shorter than that. We have the same sensation, as with anapaests, of forward moving in the irrational dactyls, and a feeling that the tempo is increasing. Also, as we proceed down the irrational values, the consonants at the ends of words get shorter.

2.3 *Irrational Trochee*

The third example of an irrational foot, given this time by Aristoxenos himself,⁴³ is an irrational version of the trochee, referred to by him as the ‘irrational *choreios*’ (ἄλογος χορείος).⁴⁴ He defines the foot as having as its leader a diseme thesis and as its follower an arsis larger than the monoseme but shorter than the diseme ($- \ddot{v}$), where $v < \ddot{v} < -$.⁴⁵ Thus, the irrational trochee essentially lies between the rational trochee and the spondee:⁴⁶

$$\begin{array}{l} (2 : i) < (2 * 1.\dot{x}) < (2 : \dot{z}) \\ (- \ddot{v}) < (- \ddot{v}) < (- : \dot{z}) \\ \text{trochee} \quad \text{irr. choreios} \quad \text{spondee} \end{array}$$

43 *Rhyth.* 20, 12 Pearson.

44 *Choreios* is a synonym for *trochaïos* in the context of metrics ($\Sigma\sigma\sigma$): cf. *Scholia to Hephaestion*, 111.23, 230.12-13, 371.14-19 Consbruch. Cf. Marchetti (2009, 71, 199 — the reference to Consbruch, 426 is a mistake).

45 The symbol \ddot{v} is here introduced, to stand for the ‘oversized’ time unit v .

46 The diacritic $*$ is here introduced in the place of $:$, in order to signal the fact that the relationship between the podic durations is not a ratio of integers (λόγος). Bakcheios (95, 313.19-23 Jan) calls a duration irrational (ἄλογος χρόνος), when its magnitude lies between that of the monoseme and the diseme. Undoubtedly, he is thinking in terms of a podic duration (X): $v < X < -$. Cf. Marchetti (2009, 195, 202), where it is rightly pointed out that the irrational *choreios* is not necessarily exactly between the two ratios, that is (2:1.5), and that Aristoxenos apprehends irrationalities as variations of the simple standard rather than in terms of a more truly accurate ratio.

The way the foot is presented by Aristoxenos suggests that the *alogos choreios* is an aesthetically accepted rhythmic reality, not a durational mistake or a temporal liberty taken during performance ('tempo rubato'). We do not take sides with Pearson (1990, 61), who sees the irrational *choreios* either as a mistake ("must have occurred unintentionally, through failure to keep strict time"), or the result of variation in tempo ("must have occurred ... when there was a variation of tempo; it was perhaps generally tolerated in closing sequences if the performer slowed down").

Earlier, Dionysios, in his discussion of the irrational anapaest and dactyl, spoke of shortened disemes, without saying whether this shortening could take values close to the unit of time. Here, Aristoxenos seems to imply that the arsis can increase almost up to the diseme. Is this possible, without losing the feel of trochees? Would it not be more logical for Aristoxenos to have said, like Dionysios, that the arsis of the *alogos choreios* is a little longer than the unit of time, but still in the vicinity of it? Could it be that Aristoxenos fell victim to his insistence on the significance of podic ratio between up and down? In other words, can 1.x take the values 1.1, 1.2, 1.3, 1.4..., even 1.9, very close to the diseme? How close to 1 can the irrational arsis stay, and how distant from it is it allowed to wander? How 'flexible', how 'expansive' can the arsis of the irrational trochee be? And if we assume that there is an upper limit imposed by the senses to its expansion, why is there a limit? Could it be that, if the irrationality goes beyond an upper limit, the senses will no longer recognize the foot as trochaic? If this question sounds a logical one to ask, would it not be perfect, if we were able to support this conjecture with results from a relevant psycho-acoustic experiment?

As no specific example of a poetic line involving irrational trochees is supplied by Aristoxenos, we shall opt, for the purposes of our experiment, for the trochaic tetrameter fragment of Archilochos, which Dionysios gives as an illustration of a series of trochees in lexis, however not presented by him as irrational in rhythm:

(- ˘ - ˘) (- ˘ - ˘) (- ˘ - ˘) (- ˘ ˘ ˘ ˘)
 Θυ-μέ, θύμ' ἄ-μη-χά-νοι-σι κή-δε-σιν κυ-κώ-με-νε
 (Σ σ Σ σ) (Σ σ Σ σ) (Σ σ Σ σ) (Σ σ σ σ)

Heart, heart by incurable bitternesses troubled

The line is most suitable for the purposes of our experiment, as it is of the simplest syllabic pattern (ΣσΣσ), not involving long syllables in monoseme durations (*syllaba longa in elementum breve*). The metronome was set at υ =

240 pulses/min, faster this time, in light of Dionysios' characterization of all three dactylic feet as exhibiting 'great dignity', 'much solemnity', 'grandeur' (ἄξιωμα μέγα, σεμνότης πολλή, μέγεθος), in opposition to the less so—however, not 'ignoble' (οὐκ ἀγενής)—iambic feet.⁴⁷

		— \dot{v}
0. rational trochee	$(- \dot{v})$,.....
1. irrational trochee	$(- \ddot{o}) = (- \dot{v} + \dot{v}/8)$,.....,
2. irrational trochee	$(- \ddot{o}) = (- \dot{v} + 2\dot{v}/8)$,.....,
3. irrational trochee	$(- \ddot{o}) = (- \dot{v} + 3\dot{v}/8)$,.....,
<hr/>		
4. irrational trochee	$(- \ddot{o}) = (- \dot{v} + 4\dot{v}/8)$,....., ← lim. rat.
5. irrational trochee	$(- \ddot{o}) = (- \dot{v} + 5\dot{v}/8)$,.....,
<hr/>		
6. irrational trochee	$(- \ddot{o}) = (- \dot{v} + 6\dot{v}/8)$,....., ← lim. tr.
7. irrational trochee	$(- \ddot{o}) = (- \dot{v} + 7\dot{v}/8)$,.....,
8. rational spondee	$(- \ddot{v})$,.....,

When only the metronome is beating, we detect no lengthening of the monoseme in cases 0, 1, 2, and 3 (upper band). Irrationality sets in clearly in case 4 for metronome alone, and perhaps for the voice, too, although the trochaic feel still remains (middle band). In case 5 we definitely hear the *alogia*, while beyond that point, in cases 6 and 7, the metre is perceived as duple: the spondee, although a little fast, is certainly claiming the territory (lower band).

Therefore, we conclude that, in our ears, a change from rationality to irrationality is not perceptible in trochaic recitation before stage 4, that is before the monoseme expands by $4\dot{v}/8$, which is 50% of the time unit (from $v = 100\%$ to $v = 150\%$). If the ancient ears had the same sensitivity as ours, then it would be logical to stipulate that the trochaic monosemoid was larger than the monoseme by at least 3 to $4\dot{v}/8$ (38–50% increase), and, perhaps, not shorter than that. In opposition to irrational anapaests and dactyls, we experience the sensation of slowing down in the rhythm, as if the tempo has dropped. Also, as we proceed down the irrational values, the consonants at the ends of words get more slurred.

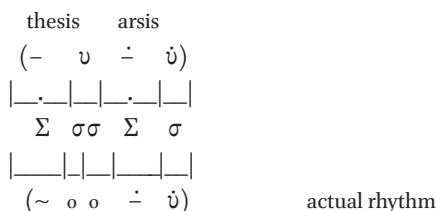
Thus, we would say that an increase of the trochaic arsis by more than 50% would shift our mind from the terrain of the trochee to that of the spondee. We might, therefore, attempt to revise Aristoxenos' definition of the *alogos choreios*, not as the foot which lies between the trochee and the spondee, but

⁴⁷ Dion. Hal. *Comp.* 17, 2.125, 127, 129 Usher.

the foot, whose irrational arsis is closer to the monoseme rather than to the diseme, and in the region of 37-50% of the time unit. After all, the name of the foot retains the term *choreios* (= trochee), a strong indication that it is construed as a variation of the trochee.

Admittedly, the choice of line—all feet of the form $\Sigma\sigma\Sigma\sigma$ —for the present experiment is not a very adequate one, as the monoseme positions are always taken up by short syllables, which should not in principle stretch out beyond unit duration. However, allowing for this shortcoming, the line serves the purpose of the experiment, which is to create, hear, and assess the effect of the progressive increase of the trochaic arsis.

The fact that two short syllables often appear in a monoseme position ($\upsilon/\sigma\sigma$),⁴⁸ has led some scholars to argue against the definition of the *alogos choreios* foot as given by Aristoxenos, namely that its leader thesis is a rational diseme, and its arsis an irrational monosemoid ($-\ddot{\upsilon}$);⁴⁹ instead, in order to accommodate four syllabic morae under a triseme duration ($\text{—}/\Sigma\sigma\sigma$), they see the whole of the triseme foot (in arsis or in thesis) of the trochaic metron as split up into irrational segments: a disemoid of $2\upsilon/4$ for the long syllable, and a submonosemoid of $\upsilon/4$ for each of the two short syllables.⁵⁰



In this way, feet stay triseme throughout, and when a 'dactylic' word happens to appear in the line, its long and short syllables are fitted into the triseme metre of the trochaic rhythm, each mora being 'squashed' by 0.25υ .⁵¹ According to this model, therefore, 'dactylic' congregations of syllables in the context of a trochaic line, whether long or short, suffer a reduction of their natural, prosodic duration, so as to make the overall rhythm uniformly triseme (or hexaseme), and 'uninterrupted'. However, this interpretation goes against the clear and

48 See the table at the end of the present section (2.3), based on West 1987, 28f. Numbers at the top of the table indicate metrical positions along the trochaic line.

49 See Winnington-Ingram (1950, 83), pointing out that the *alogia* described by Aristoxenos (the *alogos trochaïos*) "is in arsis".

50 $o = 3\upsilon/4 = 0.75\upsilon < \upsilon$. See, e.g., West (1992, 138), where irrationality in iambic metra is discussed. Cf. Silva-Barris 2011, 31-2.

51 Since: $\upsilon - o = \upsilon - 3\upsilon/4 = \upsilon - 0.75\upsilon = 0.25\upsilon$.

1				5				9				13				
(–	υ	–	υ)	(–	υ	–	υ)	(–	υ	–	υ)	(–	υ	–		basic rhythm
Σ	σ	Σ	σ	Σ	σ	Σ	σ	Σ	σ	Σ	σ	Σ	σ	Σ		basic line
Σ	σ σσ	Σ	σ σσ	Σ	σ σσ	Σ	σ σσ	Σ	σ σσ	Σ	σ σσ	Σ	σ σσ	Σ		com./ trag. line
Σ σσ	σ σσ	Σ σσ	σ σσ	Σ σσ	σ σσ	Σ σσ	σ σσ	Σ σσ	σ σσ	Σ σσ	σ σσ	Σ σσ	σ σσ	Σ σσ		troch. poetry line
Σ σσ	σ σσ	Σ σσ	σ σσ	Σ σσ	σ σσ	Σ σσ	σ σσ	Σ σσ	σ σσ	Σ σσ	σ σσ	Σ σσ	σ σσ	Σ σσ		comedy line
Σ	σ σσ	Σ	σ σσ	Σ	σ σσ	Σ	σ σσ	Σ	σ σσ	Σ	σ σσ	Σ	σ σσ	Σ		tragedy line

Trochaic tetrameter catalectic: positions along the line which accept two short syllables (σσ)

Basic line: Σ in – and σ in υ

Comic lines: σσ in any υ of metra 1-3 only if σσΣ belongs to the **same word**

Tragic lines: σσ in any υ of metra 1-3 only if σσΣ is part of someone's **name**^a

Trochaic poetry line: σσ in – of metra 1-3

Comic line: σσ in any – but the last

Tragic line: σσ in any – but the last only if there is σ **before** it

a E.g., E. *IA* 882, εἰς ἄρ' Ἰφιδένης νόστος ἦν πεπωμένος, cf. West 1982, 91.

unequivocal Aristoxenean definition of the irrational *choreios*, namely, that trochaic irrationality does not involve the whole foot, but only the follower podic duration, the arsis.

An important question to ask at this stage is, whether irrational rhythms were also encountered in song, and, more so, in instrumental music—where, in the latter, the need for ‘accommodating’ extra syllables in the rhythmic lattice does not exist—or whether the phenomenon occurred only in recitation.⁵² Our sources are not explicit in this respect, although they do seem

⁵² Some scepticism is here expressed as to whether it would be “acceptable, *a priori*, to approach those rhythms which were normally sung and those which were normally recited

to imply that irrationality applied to all three rhythmizables, word, melody, and bodily movement. The matter will not be discussed any further here, for it goes beyond the scope of the present paper.

Another important question is, of course, whether the human brain can actually follow a rhythm which contains rational and irrational podic durations, that is, whether it can count two and then somewhat less than two, in the cases of irrational dactyls and anapaests, or count two and then something a bit longer than one, in the case of the *alogos choreios*. Perhaps, a search across the musical cultures of the world may throw significant light on the issue.

Conclusions

(i) For anapaestic lines (see table below), the onset of irrationality was sensed after a reduction of the diseme by $3v/8$, while a clear transition to the (rising) tribrach rhythm was felt after a further reduction by another $3v/8$.

(ii) For dactylic lines, the onset of irrationality was observed after a reduction of the diseme by $3\cdot4v/8$, while a clear transition to the (falling) tribrach rhythm was felt after a further reduction by $4v/8$.

(iii) For trochaic lines, although a phrase in the simple form was selected for the experiment, we feel that our results are valid, from a psychoacoustic point of view. The onset of irrationality was heard after an expansion of the monoseme by $4v/8$, while a clear transition to the spondee was felt after further expansion of another $2v/8$.

		\acute{u} \acute{u} $-$
0. rational anapaest	$(\acute{u}\acute{u}-)$
3. irrational anapaest	$(\acute{u}\acute{u}\sim) = (\acute{u}\acute{u} - 3v/8)$ \leftarrow lim. rat.
6. irrational anapaest	$(\acute{u}\acute{u}\sim) = (\acute{u}\acute{u} - 6v/8)$ \leftarrow lim. anap.
		$-$ \acute{u} \acute{u}
0. rational dactyl	$(-\acute{u}\acute{u})$
4. irrational dactyl	$(\sim\acute{u}\acute{u}) = (-4v/8\acute{u}\acute{u})$	lim.rat. \rightarrow
7. irrational dactyl	$(\sim\acute{u}\acute{u}) = (-7v/8\acute{u}\acute{u})$	lim. dact. \rightarrow

using similar methods" (Silva-Barris 2011, 14). West (1992, 137) and Pöhlmann (2017, 106f.), in discussing iambic dimeters $(x-v-)(x-v-)$, express the opinion that possible irrational durations at the beginnings of the metra (*ancipitia*), "easily tolerable in spoken poetry, should give way to a clear cut rhythm in song", suggesting that the monosemoids of recitation become monosemes in song.

		— $\dot{\cup}$
o. rational trochee	$(-\dot{\cup})$	$ \dots\dots\dots \dots\dots $
4. irrational trochee	$(-\dot{\cup}) = (-\dot{\cup}+4\dot{\cup}/8)$	$ \dots\dots\dots \dots\dots\dots \leftarrow \text{lim. rat.}$
6. irrational trochee	$(-\dot{\cup}) = (-\dot{\cup}+6\dot{\cup}/8)$	$ \dots\dots\dots \dots\dots\dots \leftarrow \text{lim. tr.}$

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Appendix: Audio Examples

Anapaest 0

<https://figshare.com/s/fedc22c9fbb44daca134>

Anapaest 1

<https://figshare.com/s/8dd96d3257bdf0f2bfeb>

Anapaest 2

<https://figshare.com/s/c3a8dafa1dd69262f7b3>

Anapaest 3

<https://figshare.com/s/8eb5e84890042b8fc848>

Anapaest 4

<https://figshare.com/s/1c1101c4fb43b15ccd50>

Anapaest 5

<https://figshare.com/s/f975d63b7c0684f91990>

Anapaest 6

<https://figshare.com/s/02a602e304e14b8e56fe>

Anapaest 7

<https://figshare.com/s/3f3a34953f7957a7763c>

Dactyl 0

<https://figshare.com/s/c7bdb16c7318ed43fad4>

Dactyl 1

<https://figshare.com/s/8654fd2c1390ada07682>

Dactyl 2

<https://figshare.com/s/de702d25bb98387991a7>

Dactyl 3

<https://figshare.com/s/3c7007fcfd6dae7fb5a>

Dactyl 4

<https://figshare.com/s/bd9ab962ed48266fic84>

Dactyl 5

<https://figshare.com/s/ca873d428dcc12c07966>

Dactyl 6

<https://figshare.com/s/73ecc7d95caef6c790b7>

Dactyl 7

<https://figshare.com/s/1271948d79bcd999d5cb>

Trochee 0

<https://figshare.com/s/9cbc638a4d24da6cfcbd>

Trochee 1

<https://figshare.com/s/f82c52d3690a00fa203b>

Trochee 2

<https://figshare.com/s/b5c941f2060e101e25b6>

Trochee 3

<https://figshare.com/s/4eefic4d8ea85e1fd6cc>

Trochee 4

<https://figshare.com/s/753336729d105e0729fo>

Trochee 5

<https://figshare.com/s/12923fabd5e6c775899c>

Trochee 6

<https://figshare.com/s/f3aeba3boodccdf2378b>

Trochee 7

<https://figshare.com/s/18d5e55cdc51f49e469o>



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Christian Reception of the 'New-Music' Debate in the Church Fathers and Clement of Alexandria

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Abstract

Evaluative judgments about musical innovations occur from the late fifth century BC in Greece and Rome and are reflected in similar discussions of Christian authors in the first centuries of the Empire. This article explores how pedagogical, theological, moral, and spiritual considerations motivate judgments on contemporary pagan musical culture and conclusions about the Christian attitude towards music. Biblical references to music inspire both allegorical interpretations and the defense of actual musical practice. The perhaps most intriguing Christian transformation of the ancient musical worldview is presented in Clement of Alexandria's *Protrepticus*. Well-known classical music-myths serve here to introduce a superior 'New Song'. Harmony, represented in the person of Christ who unites a human and a divine nature, becomes the ultimate principle of both cosmos and human nature. This conception allows music to become a prominent expression of the Christian faith and even inform the moral life of believers.

Keywords

music – New Music – Patristics – New Song – harmony – Christianity – Clement of Alexandria

Introduction¹

In the context of ancient music, Christian authors so far have mostly served as a quarry for mining texts that have not otherwise been preserved or for cursory references on isolated matters. Even though some valuable scholarship on early Christian music exists,² there seems not to have been much conversation between the classical and Patristic fields in this area. The growing interest in the historical reception of ancient music makes possible cross-fertilization between the two sub-disciplines. The present article takes a step in this direction by outlining ways in which Christian authors reflect features from the so-called 'New Music' debate of the fifth century BC.³ Understanding this 'Christian reception' requires contextualizing it within the advent of a radically new way of living and thinking that produces its own patterns of criticism towards the continued pre-Christian musical practice. At first, it might surprise that we can find significant parallels with critical judgments from earlier periods. The novelty consists now less in any significantly new music arising in the Empire, but in the different premises that Christianity imports into the existing culture and which motivate original attitudes towards musical realities. As we shall see, the Christian response was in no way unified; instead, it presents itself as a set of related and multifaceted approaches.

1 Direct Echoes of Earlier Evaluations of Music in Christian Authors

When we speak of criticism in its original meaning, we mean a differentiation of not only negative but also positive aspects. In that sense, I may begin with the perhaps unexpected observation that Church Fathers have a lot of good things to say about music. Basil of Caesarea (c. 330-379) seems to be the first

1 This article is a revised version of a paper presented on July 30, 2017, at the 10th Annual Meeting of the International Society for the Study of Greek and Roman Music & Its Cultural Heritage (MOISA) at Jesus College, Oxford/UK. I am grateful for some further references that I received from the participants at the occasion and incorporated in my exposition. All translations are mine. I am grateful for the valuable input of an anonymous reviewer.

2 See, for instance, Quasten (1973/1983); McKinnon (1987 and 1990, 68-87); Foley (1996); Stapert (2007).

3 For more information on this phenomenon and its ongoing interpretation, which was the main topic of the above-mentioned MOISA meeting, see, for instance, West (1992, 356-72); D'Angour (2006); LeVen (2014); Kramarz (2016, 152-8). The current article presupposes a certain familiarity with this 'New Music', but some relevant characteristics will also surface in the course of the discussion.

Christian writer who gives in his commentary on Psalm 1⁴ extensive praise of the great benefits that music can bring about, both healing the body and leading the soul into a harmonious, well-reasoned state (ψυχαργωγία).⁵ The declared purpose of instilling specific virtues⁶ and of creating *ēthos* in the souls of the young through proper melodic education evokes clearly Plato's pedagogical strategies as outlined in the *Republic*. The famous Pythagorean story,⁷ where a soothing *aulos* tune calms a furious youth, resurfaces, although now it is the charming force of the psalms providing a remedy against uncontrolled passion.⁸ Some authors like Cassiodorus (c. 490-c. 585)⁹ or Isidore of Seville (c. 560-636) in their descriptions of musical practice rehearse anew the catalogs of praise for music and its usefulness that were common in previous centuries. This is especially noteworthy given their late date and the changed social circumstances of late antiquity.

On the other hand, we find also negative judgments evocative of the New Music debate. John Chrysostom (c. 354-407),¹⁰ for instance, speaks of lascivious songs, introduced by demons, which bring about all sorts of evil, softening and weakening the soul—negative effects attributed to certain musical features and instruments¹¹ since Plato and repeated still in Boethius (c. 480-c. 524).¹² The latter, even though his work on music makes no reference to Christianity, will be the last one to complain about the 'contemporary' so-called 'effeminate' 'theatrical' musical style, full of mixture, variation, and disgrace, as opposed to the originally modest and moderate music with simpler instruments and

4 *Hom. in Ps.* 1:1-2. This passage is almost literally repeated by Ambrose (*In Psalmum primum enarratio* 1-12) and by Nicetas (*Psalm.* 5-6).

5 A term used in the context of music for instance by Plotinus (*Enn.* 4.4 [28] 31.20) and Aristides Quintilianus 2.14, 82.3 Winnington-Ingram.

6 Basil mentions the traditional 'cardinal' virtues of manliness/courage, justice, moderation, prudence, and adds conversion and patience. See also Clement as cited below (n. 44).

7 See Iamb. *VP* 112; Quint. 1.10.32; Sext. *Emp. Mus.* 8.23. The story is elsewhere attributed to Damon; for more references and a brief discussion see Kramarz (2016, 187 n. 150).

8 See also Cassiodorus in a more original form in his letter to Boethius in *Variarum libri* 2.40.

9 He does not seem to take any issues with pagan musical practices in general when he talks about singing, instruments (including the organ), and dancing in the theater (e.g. *Var.* 1.31.4; 4.51.6-11; 5.42.1).

10 *Exp. in Ps.* 41:1-3.

11 About the censorship of instruments, see Quasten (1973/1983, 62-75). We observe also here a certain ambiguity, given the Jewish tradition (which was seen as a mere concession by God to avoid greater evil). Allowing at most the cithara (or the *psalterium*) is well in line with Plato's notorious stipulation in *R.* 399c-e.

12 *Mus.* 1.1, 180.22-9 Friedlein.

proper virtue and *gravitas*.¹³ He does not omit reference to the consequences for education and the stability of the State or Timotheus' legendary plight at Sparta. We come across similar accounts in Clement of Alexandria (c. 150-c. 250),¹⁴ Augustine (354-430),¹⁵ Cassiodorus,¹⁶ and still others. How much these authors experienced any actual musical 'decadence' or just drew from clichés handed down to them is hard to assess. At any rate, it is evident that Christian authors continued to exploit the *topoi* and formulas from earlier on. Many more examples could be given, and we shall encounter a few more in the next section where such arguments are employed to deal with the more specific issues that concerned the early Christians.

2 Evaluative Attitudes of Christian Authors towards the Musical Practice of Their Time

The Christian faith provided some important novelties: the afterlife in heaven is considered more important than the present life, whereby the degree of the integrity of the present determines happiness or perdition in the next. While Christ's death and resurrection merits redemption to all believers, his example and teaching still call for the living of charity and virtue at large. Given their steadfast certainty regarding the truthfulness of their faith, Christians felt a strong superiority over pagan beliefs and customs regardless of their own status of a persecuted minority. Nonetheless, especially those Christians with a classical education were eager to determine the relationship between the new faith and the acknowledgeable standards of the existing culture, which many deemed worth preserving in what was considered compatible with Christian beliefs and life.¹⁷

With regard to music, most objections arose because of its role in pagan rituals, which were considered idolatrous, or because its implicit or explicit connection with immoral messages or practices in banquets or feasts contradicted

13 *Quod vero lascivum ac molle est genus humanum, id totum scenicis ac theatralibus modis tenetur. Fuit vero pudens ac modesta musica, dum simplicioribus organis ageretur. Ubi vero varie permixteque tractata est, amisit gravitatis atque virtutis modum et paene in turpitudinem prolapsa minimum antiquam speciem servat* (Mus. 1.1, 181.8-16 Friedlein).

14 *Paed.* 2.4.

15 *Mus.* 1.4.5-7 and 1.5.10-1.6.12; 6.1.1; 6.4.7.

16 *Var.* 2.40.5, *Hoc ad saltationes corruptibile saeculum flectens honestum remedium turpe fecit esse commentum.*

17 See, for instance, Basil's *Address to Young Men* (*De utilitate ex Graecis auctoribus capienda ad adolescentes Christianos oratio*).

the Christian ideal of chastity. Immorality in the musical context is denounced vigorously as early as in Tatian (c. 120-c. 180)¹⁸ and repeated continuously. In the following, I will address some of the most reoccurring topics.

2.1 *Theater*

Criticism against music in the theater takes on different nuances, which all build on the traditional rejection of elements such as exaggeration, ostentation, or what is considered 'effeminate', but also add new aspects. *De spectaculis*, attributed to Tertullian (c. 160-c. 240), addresses especially the problem of immorality.¹⁹ Some, like Jerome (c. 347-420),²⁰ want to ensure that no 'theatrical' style of music enters the Church. For a similar reason, we find Ambrose (c. 340-397) rejecting the chromatic genus, particularly present in post-classical theatrical music and perceived as soft, 'female', and melancholic, and calls it *mortiferus* in contrast with the *consona vox* of the Christian community.²¹ Nicetas, even though he is defending the use of music in general, opposes the theatrical 'eccentricities' against Christian simplicity and accuses the 'foolish display' of a cithara by a human voice as unbecoming.²² The *aulos* or *tibia*, and at times also percussion instruments, are especially under attack because they could lead to sinful behavior.²³ The pipe organ, associated with

18 In his *Oratio ad Graecos* (22, singers, possibly dancers; 33, against Sappho: lewd, love-sick, licentious). See further e.g. Arnobius (d. 330), *Nat.* 2.42.2-3 *Amata, ut inflandis bucculas distenderent tibiis, cantionibus ut praeirent obscenis, numerositer et <cierent> scabillorum concrepationibus sonores, quibus animarum alia lasciviens multitudo incompósitos corporum dissolveretur in motus, saltitaret cantaret, orbes saltatorios verteret et ad ultimum clunibus et coxendicibus sublevatis lumborum crispitudine fluctuaret? Idcirco animas misit, ut in maribus exsoleti, in feminis fierent meretrices sambucistriae psaltriae, venalia ut prosternerent corpora?* See also Chrys. *Hom.* 12 in 1 *Cor.* 10-1; Ambr. *Hel.* 15.55.

19 See especially 10.8-9.

20 *Commentarii in epistolam ad Ephesios* 3.5 (versiculum 19) Migne, *nec in tragoedorum modum (...) ut in ecclesia theatrales moduli audiantur et cantica, sed in timore, in opera, in scientia Scripturarum.*

21 *Hex.* 3.1.5, Schenkl, (...) *quos non mortiferi cantus, et acroamata scenicarum quae mentem emolliant ad amores, sed concentus Ecclesiae, et consona circa Dei laudes populi vox et pia vita delectet*; cf. Macr. *Comm.* 2.4, *infame mollitie*. This genus was excluded in classical tragedy but applied later on as part of the 'musical revolution'.

22 *Psalm.* 13, *simplicitas christiana* vs. *tragicas difficultates* Stapert (2007, 102) misses the point when he thinks that Nicetas was rejecting the cithara because of its occasional association with prostitution. Not the cithara itself but the human imitation of instrumental sound is the issue.

23 See, for instance, Clem. *Paed.* 4, that mentions explicitly *aulos*, psalter, chorus and dancing, 'Egyptian' clapping, uncivilized amusement (ῥαθυμία ἄτακτος), etc. (see below). See also Arnob. *Nat.* 6.26.1-2.

pagan rituals, suffers a similar ban,²⁴ until centuries later, it would become ironically the only instrument allowed in Christian liturgy.²⁵

2.2 *Feasts and Banquets*

Amidst frequent testimonies where musical performances during celebrations and feasts are harshly rejected, the main thrust comes from concerns regarding temperance and modesty. Clement dedicates a chapter of his *Paedagogus* (2.4) to this question and takes a nuanced stand. First, we read, with striking similarities to the fifth century criticism:

The rhythmic motions to *auloi* and psalteries and choirs and dances and Egyptian clappers and similar amusements become altogether disorderly and indecent and uneducated, reinforced by cymbals and drums and those noisily sounding instruments of deception; such a banquet, as it seems to me, simply becomes a theatre of drunkenness. (...) In general, every mean sight and sound and, in a word, all shameful perception of incontinence—truly like an insensibility—one must remove right thoroughly, being cautious of the pleasure that tickles the eyes and ears and effeminates. For the various spells of broken melodies and wailing rhythms of the Carian muse corrupt the manners through the licentious and lascivious music, dragging them down into passion.²⁶

This contrasts with what he says a little later: 'If you wish to sing and play to the harp or lyre, there is no blame. You shall imitate the righteous Hebrew king in his thanksgiving to God'. McKinnon (1987, 33) sees the only solution of this apparent contradiction in an allegorical reading, in the sense that Clement did not *really* mean to endorse actual music, but closer textual analysis and other passages do not support this interpretation.²⁷ Besides, it is a commonplace

24 An exception is Cassiodorus who, against the common understanding, reads Ps. 150:4 as referring to the pipe organ and not to a simple string instrument as most commentators and the Hebrew original have it. He describes it in a way that betrays true admiration (*Expositio in Psalterium, ad loc.*).

25 See Williams (1980, 22-54).

26 2.4.40.2 and 2.4.41.3. The last sentence goes in Greek μελῶν γάρ τοι κατεαγόντων καὶ ῥυθμῶν γοερῶν τῆς μούσης τῆς Καρικῆς αἱ ποικίλαι φαρμακεῖαι διαφθείρουσιν τοὺς τρόπους ἀκολάστῳ καὶ καχοτέχνῳ μουσικῇ εἰς πάθος. Notice especially the expression αἱ ποικίλαι φαρμακεῖαι—ποικιλία being one of the typical characteristics for New Music; see LeVen (2013).

27 Clement later rejects specific melodies and harmonies as opposed to those which are 'hymns to God' or 'grave and temperate melodies' (τὰ δὲ αὐστηρά καὶ σωφρονικὰ μέλη). These technical distinctions have no allegorical meaning, given the actual musical scenario at the end of the *Protrepticus* as cited above. Cf. also *Paed.* 3.11.80.4 where

among Christian writers to justify the use of music in Christian celebrations with King David who sang and danced before God.²⁸

Quintilian (1.2.6-8) had voiced concerns about licentiousness at banquets in the family home that upsets the good musical education received in school; later John Chrysostom's suggestion regarding banquets was that the singing of psalms and other sacred hymns should be taught as a protection against drunkenness, gluttony, and lazy minds.²⁹ John is not an exception: we could cite other authors such as Tertullian³⁰ or Cyprian of Carthage (c. 200-258).³¹

2.3 *Morally Bad Music Becoming Aesthetically Bad Music*

It is interesting to observe how negative moral judgments at times become conflated with negative aesthetic verdicts. Novatian (c. 200-258) thinks that the playing of instruments leads to unnatural distortions and hence is worthless, even if the practice is not consecrated to idols.³² Ambrose finds no delight in the death-bearing songs of the theaters.³³ Augustine ties beauty and rationality together, but then also beauty and worship, as true beauty arises from the experience of God in music that lends itself to it.³⁴ According to Cassiodorus, music and virtuous actions are intrinsically correlated; what is not harmonious and well-ordered is not even bad music but simply not music at all.³⁵

2.4 *To What Degree Christians Should Use Music*

McKinnon asserts that "to a Church Father, everyday musical reality was two things: the pagan musical practice that surrounded the Christian population

Clement complains that Christians sing hymns on immortality in church while outside they participate in pagan erotic musical amusements with the motto 'let us eat and drink, for tomorrow we die'.

28 2 Sam 6:5 and 14-15. See, for instance, Cyprian of Carthage *De spectaculis*, defending David's dance as opposed to indecent or eccentric ones; also in *De zelo et livore* 2, '[The enemy/devil] tempts the ears through melodious music in order to loosen [them] with the hearing of more sweet sound and to enfeeble the Christian strength'.

29 *Exp. in Psalt.* 41:1-3.

30 *Apol.* 39.16.21 (after meals at nightfall); *Uxor.* 2.6.1-2; 2.8.8: the contrast between what a pagan husband will sing for his wife and what a Christian couple will sing for each other (*Sonant inter duos psalmi et hymni, et mutuo provocant, quis melius Domino suo cantet*). As we can see, both content and aesthetics are involved.

31 In *Ad Donatum*, 16 he recommends the enjoyment of good spiritual songs after a meal.

32 *Spect.* 7.1-3.

33 See above n. 21.

34 *Ord.* 2.11.33, *Quod vero ad aures [pertinent], quando rationabilem concentum dicimus, cantumque numerosum rationabiliter esse compositum, suavitas vocatur proprio iam nomine*. About beauty and God, see, for instance, *Mus.* 6.11.29-30 and 6.12.36.

35 *Inst.* 2.5.3.

on every side and the singing of psalms and hymns in church”.³⁶ This statement does not capture the full scale of musical practice by Christians because, as we just saw, various fathers recommend singing at banquets, as long as it is proper praise of God. We also hear about singing at work, for instance, when ploughing the fields,³⁷ sailing the seas, and before going to bed—hence not just during worship.³⁸ However, we can observe varying attitudes among the pastors of the early Church regarding the use of music in the Christian context. A typical example is the interpretation of St. Paul’s letter to the Ephesians (5:19), which reads according to the Vulgate: *implemini Spiritu loquentes vobismet ipsis in psalmis et hymnis et canticis spiritalibus cantantes et psallentes in cordibus vestris Domino*.³⁹ Jerome takes an extreme stand,⁴⁰ reading *cantus spirituales* as a mental exercise with no need for actual sound.⁴¹ Jerome does not seem to envision any ‘good’ liturgical music: silent prayer from the heart is preferred.⁴² Against such a view, Nicetas writes a whole pamphlet, *De psalmodiae bono*, to strongly defend vocal practice and to assert that St. Paul did mean real song.⁴³

36 Qtd. in Strunk (1998, 114).

37 E.g. Hier. *Epist.* 46.12.

38 Clem. *Str.* 7.7.35 and 49. See also Ps.-Chrysostom, *De paenitentia et in lectionem de Davide et de uxore Uriae*, ‘Not only in the cities and churches does [David’s psalm music] shine forth in this way at any time and at any age, but also in the fields and in the solitary places’. See further Aug. *Enarr.* 2 in *Psalt.* 32.8.3; Isid. *Orig.* 3.17.2.

39 I am citing the Latin text since the debate was carried out among Latin writers. A similar notion in *Col.* 3:37.

40 Perhaps due to the dream he says he had in 375, in which he was accused of being a Ciceronian and not a Christian—which led him to reject pagan literature; see Hieronym. *Epist.* 22 *Ad Eustochium*.

41 See *In Eph.* 5:19, *laudare Dominum magis in animo quam voce debemus*. Also, *sic cantet servus Christi, ut non vox canentis, sed verba placeant quae leguntur: ut spiritus malus qui erat in Saule eiiciatur ab his qui similiter ab eo possidentur, et non introducatur in eos qui de Dei domo scenam fecere populorum*. Instead, *qui vero de superioribus disputat et concentum mundi omniumque creaturarum ordinem atque concordiam subtilis disputator edisserit, iste spirituale canticum canit*.

42 Another example of Jerome’s negative opinion of music is *Epist.* 54.13.1, *Cantor pellatur ut noxius; fidicinas et psaltrias et istius modi chorum diaboli quasi mortifera Sirenarum carmina proturba ex aedibus tuis*.

43 *Scio nonnullos non solum in nostris sed etiam in orientalibus esse partibus qui superfluum et minus congruentem divinae religioni existiment psalmodum et hymnorum decantationem: sufficere enim putant si psalmus corde dicatur; lascivium esse si oris sono proferatur (...) non more tragico vocis modulamine garriendum, quia sufficit Deo qui corda scrutatur si in cordis secreto cantatur. At ego, duce veritate, sicut non reprehendo psallentes corde (semper enim utile est quae Dei sunt corde meditari), ita conlaudo eos, qui etiam sono vocis glorificant Deum* (2.1–5).

In his *Stromata*, Clement admonishes the Greek catechumens not to pass by musical education plugging their ears, as Odysseus did when meeting the Sirens, unlearned in rhythm and melody, but to use it to strengthen the soul and thus, for instance during banquets, subdue by song their desires and praise God in gratitude.⁴⁴ Clement erects here a new educational ideal, musically grounded, not unlike what Plato had in mind in his *Republic*. We know that Ambrose actively promoted liturgical chant and composed hymns himself.⁴⁵ Many, such as John Chrysostom, take an intermediate position, allowing for singing but not considering it indispensable either.⁴⁶ Augustine is conspicuously vacillating:⁴⁷ he does acknowledge the beneficial emotional effect that can excite religious fervor and transported him in his conversion; at the same time, aesthetically appealing music may be a threat to undistracted prayer and contemplation as he describes with his remarkable capacity for introspection in *Conf.* 10.33.49–50. His solution seems to rest in the formula *voce cantamus, ut nos excitemus, corde cantamus, ut illi [Deo] placeamus*.⁴⁸ But Augustine also admonishes us not to dare sing badly before God if we do not even dare to do so before a human critic.⁴⁹ Liturgical chant should comply not only with the requirement of simplicity but also with aesthetic qualities.

44 Str. 6.11.89–90.

45 See Augustine's testimony in *Conf.* 9.7, and Ambrose's own words in his *Sermo contra Auxentium de basilicis tradendis* 34 (*Hymnorum quoque meorum carminibus deceptum populum ferunt. Plane nec hoc abnuo. Grande carmen istud est, quo nihil potentius. Quid enim potentius quam confessio Trinitatis, quae quotidie totius populi ore celebratur?*).

46 Stapert (2007, 86–91) shows how his perspective shifts between rejecting harmful arousal and provoking beneficial emotion without which love is not possible.

47 He himself admits *fluctuo inter periculum voluptatis et experimentum salubritatis* (*Conf.* 10.33.50; cf. also *Epist.* 140.44). Further in *Conf.* (ibid), *cum suavi et artificiosa voce cantantur, fateor, aliquantulum adquiesco, non quidem ut haeream, sed ut surgam, cum volo*—the key for him is that he is free to leave it aside. In *Mus.* 6.14.45–6 and 6.15.49–50, earthly rhythms (i.e. music) are good as long as they do not deceive us to search for beatitude in the enjoyment of creatures. In *Retract.* 1.11.2–3, Augustine clarifies that this problem will no longer exist in heaven, after the resurrection and glorification of the body. This is consistent with the Church's teaching of the inordinate state of the human condition due to original sin, which in heaven will be completely substituted by a renewed perfect state in God's presence.

48 *Enarr. in Psalt.* 147.5.

49 *Enarr. 2 in Psalt.* 32.8, *Canta illi [= Deo], sed noli male. Non vult offendi aures suas. Bene canta, frater. Si alicui bono auditori musico, quando tibi dicitur: canta ut placeas ei, sine aliqua instructione musicae artis cantare trepidas, ne displiceas artifice; quia quod in te imperitus non agnoscit, artifex reprehendit; quis offerat Deo bene cantare, sic iudicanti de cantore, sic examinanti omnia, sic audienti? Quando potes afferre tam elegans artificium cantandi, ut tam perfectis auribus in nullo displiceas? Ecce veluti modum cantandi dat tibi; noli quaerere verba, quasi explicare possis unde Deus delectatur.*

2.5 *Musical Allegories*

As already mentioned, the exegesis of patristic texts at times encounters difficulty in distinguishing allegory from speech about 'real' music. Beyond doubt, allegory is a frequent and popular form of interpreting Scripture and other realities. For instance, the *psalterium*, being strung at the upper end, represents heaven, whereas the cithara, being strung at the lower end, stands for the earth;⁵⁰ or the ten strings of the *psalterium* may signify the Ten Commandments.⁵¹ Other images stand in the classical tradition, such as taking the harmonious union of the musicians as a metaphor for the unity in the Christian community.⁵² But does this mean that Christians themselves were not part of those musical activities that served for allegories and analogies? I propose resolving the ambiguity and shifts of possible meanings by the assumption that the Christians moved on various levels (material, spiritual, and moral) at the same time: when they heard (or played) a cithara, they could rejoice over the beautiful sound, hear in it the harmony of God's law, and feel inspired to become a cithara themselves⁵³ in order to live in consonance with the divine order as expressed in his commandments.

2.6 *The Question of Enjoyment and Pleasure*

As is well known, Plato had qualms about the pleasure caused by music, while others, like Philodemus, saw in pleasure the only real usefulness of music. According to Tertullian, pleasure-seeking music makes one too weak for martyrdom, pagan spectacles do not leave room to think of God, and could lead to idolatry and immorality.⁵⁴ Athanasius of Alexandria (c. 296-373) rejects pleasure as a licit motivation and allows song only to signify the praise of God with all one's effort and to create or manifest harmony in man himself.⁵⁵ Basil, to the contrary, sees the enjoyment of music in an entirely positive way, because through it, the Holy Spirit can transmit truth just as a doctor administers

50 E.g. Aug. *Enarr. 2 in Psalt.* 23.2.1-5; *Enarr. in Psalt.* 42.5, 80.5, 150.6.

51 E.g. Aug. *Doctr. christ.* 2.16.26; so also Cassiodorus in *Inst.* 2.5.3 and in *Exp. in Ps.* 80.2.

52 E.g. Basil. *Hom. in Ps.* 29.212.48-9, εἰς ἑνὸς χοροῦ συμφωνίαν τὸν λαὸν συναρμόζουσα. See also Ignat. *Eph.* 4; Ambr. *Expl. Ps.* 1.9.3-5; Cassiod. *Var.* 2.40.13. As an example among classical authors consider Cicero, who parallels musical *concentus* with civil *concordia* (R. 2.42.69, completed by Aug. *Civ.* 2.2.1).

53 E.g. Chrys. *Exp. in Ps.* 55.158.41-4, 'making a full *symphonia* of mind and body' (ἀλλ' ἐὰν θέλῃς, οὐ σαυτὸν ἐργάσῃ κιθάραν, νεκρώσας τὰ μέλη τῆς σαρκός, καὶ πολλὴν τῷ σώματι πρὸς τὴν ψυχὴν ποιήσας τὴν συμφωνίαν).

54 *Spect.* 1-2, 10, 25.

55 *Ep. Marcell.* 27-9. However, he does admire the harmonious sound of the lyre as a symbol for cosmic harmony (*Gent.* 38).

bitter medicine with honey, almost without notice.⁵⁶ John Chrysostom stresses that the psalms provide both pleasure and profit along with holiness.⁵⁷ And according to Augustine, music adds cheerfulness and even love to song: *qui enim cantat laudem, non solum laudat, sed etiam hilariter laudat. Qui cantat laudem non solum cantat, sed et amat eum quem cantat. In laude confitentis est praedicatio: in cantico amantis affectio*.⁵⁸

2.7 Summary

So far we have observed many parallels between pre-Christian and Christian views on musical *ēthos*. The patristic writers appear to “sing with (neo-) Platonic and Stoic moralists in the same choir manly and virtuous tunes to cithara or lyre, filled with disgust over the excesses of passion, obscenity, and overindulgent style in decadent parties or festival music”.⁵⁹ Another similarity lies in the vacillating attitude towards music: if ancient music theorists appear at times to leave aside actual music for mathematical-cosmological speculations as the ‘real’ harmony, Christian musical allegory becomes popular but yet does not eclipse its grounding in actual musical practice. The musicality of David’s psalms in particular seems to have prevented Christians from avoiding music altogether due to the dangers they perceived in the pagan musical customs. But there is a still deeper layer to this, which we shall now delve into by exploring what I consider the most original and intriguing conception that a Christian author has ever bred from the classical tradition.

3 Clement of Alexandria’s Transformation of the Ancient Musical Worldview

Clement was educated in the cultural metropolis of Alexandria and was steeped in the classical tradition: it is hard to tell whether he cites ancient authors less or more frequently than Holy Scripture. Clement’s *Protrepticus* (or

⁵⁶ *Hom. in Ps.* 11.

⁵⁷ *Exp. in Ps.* 411.

⁵⁸ *Enarr. in Psalt.* 27.1. Cf. *Serm.* 34.1.1, *Canticum, res est hilaritatis; et si diligentius consideremus, res est amoris*. See also Isid. *Orig.* 6.19.17, that almost literally repeats Augustine. In general, Aug. *Mag.* 1.1 considers enjoyment as that which music adds to mere spoken words, and approves of it as long as there is a *rationabile concentus* (*Ord.* 2.11.33). But he even allows for mindless pleasures, as long as one seizes music for them and is not seized by them (*Mus.* 1.4.5). In any case, full enjoyment (*voluptas*) requires that music is understood in its immutable *numera*, which point to God (6.5.9-6.12.36). See also Lact. *Inst.* 6.21.9.

⁵⁹ Kramarz (2016, 401).

Cohortatio ad gentes), written around the year 190 AD, is intended to lead pagans to the Christian faith.⁶⁰

3.1 *The Story of Eunomos and the Cicada*⁶¹

What calls our attention is that he frames the attempt to win over his pagan audience with reference to stories about the magical power of music, associated with the Greek musicians Amphion of Thebes, Arion of Methymna, and the Thracian Orpheus.⁶² These are all ‘old school’ musicians, and Clement is going to discard them on behalf of ‘new music’, *καινὰ ἀρμονίαι* (1.2.4). But first, he introduces a fourth musician with the telling name Eunomos. This *μῦθος*, for which plenty of previous versions exist,⁶³ he recounts in detail with some twists. First, Clement introduces Eunomos at Delphi performing a song honoring a dead snake, which his educated readers should readily identify as the famous *Pythikos nomos*.⁶⁴ Next we learn that he sings to his own cithara and that there is a competition (*ἄγών*). But while we are to think of the ordinary musical contest, Clement tells us of *τέττιγες* (‘cicadas’)⁶⁵ singing along in the trees in the heat of the day and outperforming the *νόμοι* of Eunomos with their own *ᾠδή*. Why are they better, despite of being *αὐτόνομοι* (‘spontaneous’)? They do not sing to a dead snake, but to the all-wise God.

Clement seems to be hoping that the appeal of his multilayered use of *ἄγών* and the witty puns with *νόμος* have enthralled his pagan audience sufficiently

60 For a discussion whether Clement actually wrote to pagans or rather to a Christian audience, see Stockhausen (2006, 83–93) and Hofer (2015, 504 n. 30). I find Stockhausen's claim that the audience is catechumens not fully convincing; she admits herself (89) that the first 95 numbers are directed against the Greek mythology and worship of gods, which would not be such an issue for those already on the way to being baptized.

61 A very good commentary on the whole passage is Halton (1983). He provides a much more detailed analysis than I am able to give here; however, his work can still be enriched by some more textual observations related to the previous discussion. See also Stapert (2007, 42–59), Hose (2014), and Kramarz (2016, 359–67).

62 For Amphion, see Eur. *Ph.* 822–5; Paus. 6.20.18; 9.5.7–9, 17.7; for Arion, Hdt. 1.23–4; Plin. *HN* 9.8.28; Strab. 13.2.4; Paus. 3.25.7; Gel. 16.19; for Orpheus, Eur. *Ba.* 559–64; *AP* 7.8–10; Dio Chrys. 32.62–6; Paus. 6.20.18, 9.17.7, 30.4 (questioning the truthfulness of these stories).

63 Primarily Strabo's *Geographica* (6.1.9.4), quoting Timaeus (F43b) as a source. See also *AP* 6.54 (Paulus Silentiarius) and 9.584 (Anonymous, speaking in the persona of Eunomos). Strabo tells the story to explain the bronze statue at the Alex (or Halex) river between Rhegine (= Reggio Calabria) and Locris (= Locri, Calabria): Eunomos was contesting Ariston of Rhegion; the cicada helped just by supplying one tone. *AP* 6.54 has Parthis as the competitor; *AP* 9.584 has Spartis.

64 A specific tune, celebrating Apollo's slaying of the snake at Pytho/Delphi. For more information, see West (1992, 212–4).

65 At times, as by Butterworth (1919), imprecisely translated with ‘grasshoppers’.

to swallow this first punch against their beliefs. But he quickly goes on with the story: mishap pursues Eunomos, for one of his strings breaks, and one of the cicadas swiftly jumps onto the neck of the cithara and chirps from there, replacing the broken string. The duo wins the competition, as is clear from the bronze statue that was erected for them afterwards. And here Clement deals a double blow: for one, while the previous accounts have the cicada simply supply the missing string and thus adapt to Eunomos' tune, Clement insists that it was not the song of Eunomos which carried the victory but the song of the cicada, because in truth Eunomos harmonized with the remaining strings to the song of the τέτιξ. Secondly, and this is the next unexpected twist: in the initial examples, Amphion, Arion, and Orpheus supposedly enchanted animals, rocks, and trees with their music and moved them literally; but here, Clement claims that the ancient myth about Eunomos was wrong in assuming that the cicada was likewise attracted by Eunomos, but that instead it jumped ἐκὼν and sang ἐκὼν, on its own account, as Clement repeats twice to drive home his argument.⁶⁶ And with this, he believes his audience prepared enough to declare all the previous myths empty: how could they believe in animals enchanted by music rather than in the shining face of truth, which, one could add, is exemplified by the cicada's prize-winning song for the creator God!

Clement goes on to decry all the errors and evil things that the Greeks converted into hymns, tragedies, and dramas, now all grown old (γεγηρακός),⁶⁷ and invites them to bring down truth from above (1.2.2) to the holy mountain of Zion where the genuine champion (γνήσιος ἀγωνιστής) is crowned in the theater of the whole cosmos. To wit: 'But this my Eunomos does not sing the νόμος of Terpander⁶⁸ or of Kapion, nor [does he sing] the Phrygian or Lydian or Dorian, but the καινῆς ἀρμονίας αἰδιδιον νόμον, τὸν φερώνυμον τοῦ θεοῦ, τὸ ἄσμα

66 This suggests that Clement used Strabo and not *AP* 9.584, because the latter also has the cicada approach spontaneously (ἀπ' αὐτομάτῳ). However, all older versions have the cicada adapt to Eunomos' music.

67 Hose (2014, 47–8, esp. n. 45) relates this expression to the *topos* of a *mundus senescens*, meaning a period of decadence in the development of a state or, in the Stoic conception, part of the recurring cycle of the world; here, however, as Hose observes correctly, this idea is applied not to politics but to the pagan literature and culture, which is being substituted by Christian truth and new poetry.

68 His name might have a special ring here because he was known for his innovations of adding cithara strings from four to seven, and singing with them νέους ὕμνους (Strab. 13.2.4). Plutarch (*Instituta Laconica* 17 = *Mor.* 238c) reports the adding of one string only, in a story very similar to what is later reported about the musical innovator Timotheus of Miletus. Boethius (*Mus.* 1.1 182.7–183.10 Friedlein) claims to cite *verbatim* the condemnation decree issued by the Spartans against Timotheus with the penalty to reduce his eleven (!) strings to seven.

τὸ καινόν, τὸ Λευιτικόν,⁶⁹ and then attributing to him a phrase from Homer's *Odyssey* (4.221), 'which soothes anger, which makes all ills be forgotten'.⁷⁰ According to Clement, this new harmony (or song, or *nomos*) does not deceive like the ancient musicians with sorcery that brings about violence, idolatry, and ultimately slavery to daemons, but his ὥδός has tamed the fiercest of all animals, man, through his συνῶδός ἀληθείας. Clement illustrates this with creative imagery that juxtaposes the previous 'miracles' with the new ones applied to the human condition, concluding: 'how mighty is this New Song!' (1.3.2-1.4.4).⁷¹

3.2 *The New Song*

And he does not stop here. This New Song has tuned the discordant elements of water and land, fire and air into a 'symphony', like blending the Dorian with the Lydian mode, bringing about order and harmony within the universe.⁷² This carries a striking resemblance to the well-known Orphic and Pythagorean-Platonic music-cosmology, but it also includes the blending of different *harmoniai*, which was a characteristic of the New Music.⁷³ Clement

69 Butterworth translates Λευιτικόν with 'Moses', according to which one would take 'Song of Moses' as reference to *Deut.* 32:1-43 (praising God's salvific deeds to the people of Israel during the Exodus and scolding them for their sin of idolatry). If, however, Λευιτικόν is to mean 'priestly', which is possible because Clement talks of Jerusalem and Zion just shortly before, the identification with Moses would be incorrect, since the priestly tradition of the tribe of Levi is associated with Aaron, Moses' older brother. Still, the immediate context is 'song', for which the association with the 'Song of Moses' appears to be more probable.

70 Referring to a drug that Helen pours into the wine during the meal for Telemachus and Menelaus. Clement wittingly adds that the New Song mixes in a sweet and truthful medicine of persuasion (φάρμακον πειθοῦς), which is precisely what music adds to any message. For that reason, I consider unnecessary the text emendation πένθους ('against sorrow') as suggested by Reinkens/Stählin, referenced in Butterworth (1919, *ad loc.*).

71 With using καινός (as opposed to νέος), Clement is consistent with the terminological distinction that D'Angour (2011, 19-27) observes for radical renewal (as opposed to gradual innovation).

72 See similar already Athenagoras (c. 133-c. 190), *Leg.* 16; *Tert. Nat.* 2.5.9; Athanas. *Gent.* 42. However, none of these uses the term 'New Song' as Clement does. Raffa (2017) explores how Clement seems to have in mind the structure of a real musical scale when describing how the Christ-λόγος leads the universe from chaos to cosmos. Raffa supports this thesis with terminological parallelisms between Clement and Ptolemy's *Harmonica* and the fact that Ptolemy lived and worked in Alexandria just about half a century before Clement.

73 Also described by Hippolytus (c. 170-c. 236) in *Haer.* 1.2. Halton (1983, 183) cites the *Orphic Hymn* 34 to Apollo, which describes Apollo's musical harmonizing of the world. Raffa (2017, 55f.) does not interpret the mode blending of Dorian and Lydian in the sense of a New-Music modulation but as a scale composed of different kinds of tetrachords as attested in Ptolemy, which, as Raffa himself points out, would still constitute an innovation compared to the Aristoxenian tradition.

continues, building upon pieces of ideas already found in previous Christian authors⁷⁴ and advancing beyond them. His New Song is also responsible for the harmony within the 'little cosmos' between human body and soul, to play music before God on his many-voiced instrument (διὰ τοῦ πολυφώνου ὀργάνου), another association with the New Music vocabulary, again with a positive undertone.⁷⁵ The Spirit of God sings to the human being as an instrument.⁷⁶ And further: The Lord 'raised' (i.e. created) man as a 'breathing instrument' according to his own image,⁷⁷ God being *himself* an all-harmonious instrument (ὄργανον παναρμόνιον), well-tuned and holy, 'transcosmic'⁷⁸ wisdom, heavenly Logos. The Word of God, the New Song, is an instrument himself, of which Clement finally, in 1.6.5-1.7.1, reveals the name, Christ (ὁ Χριστός, καὶνὸν ἄσμά μοι κέκληται).

And what is this song like? It opens the eyes of the blind, the ears of the deaf, brings the erring back to righteousness, defeats death, and so forth. It brings order and beauty—being 'cosmetic'—into a wounded world. Paulinus of Nola (c. 354-431) will later make explicit in a poetic way what Clement only insinuates here: that the human being is that instrument with the broken string, like Eunomos' cithara, which Christ has now adopted for his use and restored.⁷⁹

74 E.g. Athenagoras (see nn. 72 and 76). Halton (1983, 184) thinks that Pseudo-Justin might be Clement's source, but depending on the dating, the former might rather have drawn from Clement.

75 The term πολύφωνος links to ποικίλος (see above, n. 26). See also 1.8.3, where Clement speaks of the various redemptive deeds of Christ, repeats πολύφωνος, and adds the attribute πολύτροποι ('multiple melodic forms').

76 1.5.3, citing an unknown (biblical?) quote: 'you are my cithara and *aulos* and my temple'; see also *Str.* 6.11.88. The idea of *prophets* being an instrument of God (i.e. his Spirit, dispensing inspiration to their own words) has been used by the apologists previously (see Hipp. *Antichr.* 2.46; Pseudo-Justin *Cohortatio ad Graecos* 8; Athenag. *Leg.* 7; Thphl. *Ant. Autol.* 2.9), but Clement applies this concept now to the human being as such.

77 1.6.4, καλὸν ὁ κύριος ὄργανον ἔμπνουν τὸν ἄνθρωπον ἐξεργάσατο κατ' εἰκόνα τὴν ἑαυτοῦ.

78 With this I attempt to translate the word ὑπερχόσμιος: the concepts of 'cosmos', 'order' and 'beauty' are exceedingly present in God's wisdom.

79 *Carm.* 20.11.30-61. Excerpt, *At nobis ars una fides, et musica Christus, / qui docuit miram sibi-met concurrere pacem / disparis harmoniae quondam, quam corpus in unum / contulit assumens hominem, qui miscuit alium / infusa virtute Deum, ut duo conderet in se, / distantesque procul naturas redderet unum. (...) Ille igitur vere nobis est musicus auctor, / ille David verus, citharam qui corporis huius / restituit putri dudum compage iacentem, / et tacitam ruptis antiquo crimine chordis / assumendo suum Dominus reparavit in usum, / consertisque Deo mortalibus, omnia rerum / in speciem primae fecit revirescere formae, / ut nova cuncta forent, cunctis abeunte veterno.*

3.3 *An Incarnational Cosmology of Harmony*

Underneath the surface of Clement's approach lies hidden a great innovative force, for it is marked by a significant difference from what might at first appear to be little more than a rehashed Pythagorean-Platonic cosmology. Calvin Stapert (2007, 58) points in the right direction when stating that Clement 'went beyond Plato by placing *musica humana* above *musica mundana*'. Aristides Quintilianus considered harmony the foundational principle of the universe, thus establishing music as the metaphysical structure of all there is.⁸⁰ Now, for Clement, at the origin there are not just the Pythagorean cosmic proportions or the abstract musical harmonic principle of Aristides, but a person: Jesus Christ. He, being both God and man,⁸¹ is the incarnate Logos with a divine and human nature 'in tune' with each other, according to whose image all human beings are created. His own essence is rational harmony, which makes him the *princeps analogatum*, the ἀρχέτυπος⁸² and harmonic perfection of all there is,⁸³ and hence he is the ever New Song and yet also the Oldest.⁸⁴ Through the Holy Spirit, he bestows on the cosmos and on all human beings his harmony, thus healing the wounds of humanity and reconciling what is in discord: φιλόανθρωπον τὸ ὄργανον τοῦ θεοῦ.⁸⁵ The Christian belief, as it were, transforms the cosmocentric vision of musical harmony into an incarnational one.⁸⁶ From the mythological personification of Harmonia,⁸⁷ which projects human music into the divine realm, we have arrived at a theological *kenōsis*, where the divine harmonic order—the Holy Trinity—descends and becomes present in the

80 See Kramarz (2016, 340-7).

81 1.7.1, ὁ μόνος ἄμφω, θεός τε καὶ ἄνθρωπος.

82 12.120.4.

83 See similar in Paul. Nol. *Carm.* 20.32-50 and Ambr. *Hex.* 2.1.1, 3.1.3-5, 3.4.18, 3.5.21, 6.9.54-5; Prud. *Apoth.* 773-887, with a fine comparison between *aulos* blowing and God breathing the soul into the human being's body (836-52).

84 See Clem. *Str.* 7.16.102, with a brief allusion to the New Song, adding 'although most ancient' (in German one could coin the word 'Urlied'), thus referring to the Christian dogma of Christ's pre-existence in the Holy Trinity. Christ is the Alpha and the Omega (*Rev.* 1:8, 21:6-7, 22:13). D'Angour (2011, 141) reflects upon the relationship between old and new with reference to Eros (the oldest of the gods and yet new, as in Pl. *Smp.* 178a-c, although very different in 203b-c) and how old things (such as Homer's epics) can remain ever 'fresh'; see also further *Smp.* 206e-209e about the relationship between love and immortality.

85 1.6.2., 'the instrument of God is loving to human beings'.

86 In line with Stapert's statement, one could also say 'anthropocentric', but this would obscure the divine part in Christ's person. The human being can only be the central point of reference for the rest of the cosmos if it is represented by a creator who is at the same time human and divine.

87 The latest edition of this is found in Martianus Capella (book 9 of his *De nuptiis Philologiae et Mercurii*, written c. 430, almost 250 years after Clement).

human creature through the one who, in his person, harmoniously conjoins both the human and divine nature.

All this is more than amusing imagery or allegory because, on the one hand, the concept of harmony is dogmatically grounded in Trinitarian and incarnational theology, and because, on the other hand, the actual singing of psalms, God's own 'sung' Word, becomes for the Christian the most proper expression of his or her identity of being an instrument in God's hands⁸⁸ and the celebration of eternal Harmony through created harmony. It is only consequential, then, that Christian life must be 'in tune' with Christian faith and worship, thus harmonizing with the example of Jesus Christ who revealed himself as the perfect human being.⁸⁹ Hence, actual human music in its proper form, good human (moral) life, and the beauty of the cosmic order are but variations of the same New Song.⁹⁰

Conclusions

The general attitude of Christians towards music, even if it is nuanced in the various authors, can now be understood with Clement's 'incarnational cosmology of harmony' as its backdrop, prepared by previous authors and continued by others, and this in two ways. First, Christian music must be detached from any association with what is deemed incompatible with the new faith and life revealed in the Gospel (idolatry, immorality, etc.). Second, music is validated by the beauty and emotional appeal that authentically reflects or is conducive to the truth and goodness attributed to what is called the 'New Song'. To achieve the first objective, Clement and other Christian writers readily draw from ancient musical criticism of both moral and aesthetic deviations. They do so now, however, not in order to preserve something old, but—and this

88 Music is only *one*, but the *proper* way to express harmony or symphony; cf. Origen's *Commentarius in Matthaeum* (14.1). Notice also the Christian understanding of earthly liturgy as participation in the heavenly liturgy, with our liturgical song reflecting the angelic choirs before God's throne; see Aug. *Mus.* 6.11.29; Ratzinger (1997, 128-39).

89 E.g. *Joh.* 1:14; *Col.* 1:19; Second Vatican Council *Gaudium et spes* 22, in Flannery (1988, 922-4).

90 Cf. Stapert (2007, 59), referring to Clem. *Protr.* 9.88.3, 'This symphony is a Christian *musica humana*, of which even the music of the spheres is but an echo, and of which the best of our *musica instrumentalis* is also an echo'. Similar Darmstädter (1996, 42, my tr.), 'Music no longer claims necessarily to be the mirror reflecting harmonious processes and movements of the cosmological-metaphysical level onto the level of a living being, its soul and body. It rather takes a mediating position between men and the Word of God, which makes it comprehensible, sounding in the first place'.

corresponds to the second objective—for them music is meant to express something (or rather somebody) that for the ‘old’ and wounded human nature is always a new experience. Because of this, we can observe the beginning of a remarkable inversion. As soon as Clement leaves behind the contention of pagan musical practices, his metaphysical understanding of harmony allows him to view some features of the New Music positively, among which are the mixing of modes or multi-melodic and multi-voiced sound.⁹¹ This is significant for what follows.

Quasten (1983, 66-75) highlights the initial preference for unison song in the early Church, at least according to some authorities, to emphasize the unity of God and of the community. Had this view prevailed, Plato’s restrictive policy of musical simplicity and austerity might have gained its victory in the Christian world, which would prevail, after all, during the centuries of plain chant. It would require another study to corroborate historically whether there is a correlation between Christian beliefs and the emerging polyphony during the Renaissance. But after all we have seen, there is some ground to suspect that Clement’s intuition of an incarnational harmony contained the potential to allow for the development of music, even if it actually took place only centuries later, in a direction different from the traditional monophony or homophony: towards a balanced variety and polyphony, as a reflection of the harmony between the persons of the Trinity or between the human and divine natures of Christ.⁹²

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91 Something similar could be said about the initial prohibition of instruments for Christian worship, which—once the association with pagan rituals is no longer an issue—gives way to a gradual increase of instrumental variety, at least in the Roman/Latin tradition, first with the church organ and its growing number of registers, and later by allowing also other instruments. The Greek orthodox tradition has been more resistant to the liturgical use of instruments.

92 If this can be found true, it could account for the fact that among all known musical cultures, polyphony has developed only in the Christian West.

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Book Reviews



De Simone, M., (2016) *La lira asiatica di Apollo. Interazioni musicali tra la Grecia antica e il Mediterraneo orientale*. Pisa: Introduzione di Paola Volpe Cacciatore, Edizioni ETS (Anthropoi. Studi e materiali di Antropologia storica del mondo antico, 11). 244 pp. ill., ISBN 9788846744555.

The interactions between two ethnic groups, along with cultural processes like assimilation, adaptation, selection, devaluation, redefinition and mutual influence are usually studied by anthropologists. Such concepts are the basis of the study offered by Mariella De Simone, who deals with ancient Greece and the Near East in particular, and that is why this work has been published in a series devoted to the historical anthropology of the ancient world. At the same time, the main focus of this book is music, both musical instruments and musical traditions. The interdisciplinary approach taken by the author is clearly indicated by the title, which focuses attention on three important elements of the investigation: first, Apollo, the god of the panhellenic sanctuary in Delphi and a symbol of ancient Greek culture and identity; second, the lyre, a musical instrument usually attributed to Apollo and therefore a symbol of the constrained music of Greece; third, Asia, i.e. the Near East, the 'other' world which appears exotic, sometimes fascinating and sometimes exaggerated. So this book aims to provide a picture of the relationship between Greece and the Near East, taking musical culture as a meaningful source of information, and the author very carefully considers data from a chronological perspective through the centuries, from the 3rd millennium BC (the development of the Minoan civilization on the island of Crete) to the 4th century BC (the end of the classical age in Greece). The investigation is divided into two parts (20): the first one is based mainly on archaeological data, while the second focuses on Greek literary sources.

In the first part each musical instrument is taken as an example of a cultural process, and the results are sometimes unexpected. Lyres such as the *phorminx* and *chelys-lyra* first spread from Mesopotamia to Crete and then to the

Aegean, but they underwent some important organological adjustments that imply a weaker sound, so they represent a case of adaptation and redefinition. Common opinion considers the *aulos* as an oriental aerophone that arrived in Greece from Phrygia, but the early presence of this musical instrument in the Aegean is more or less contemporary with its appearance in Mesopotamia (in the royal cemetery at Ur) in the 3rd millennium BC. Moreover, a particular kind of *aulos* called *elymos* or *kerastēs* is usually connected to Phrygia, but it was carved on a tomb at Hagia Triada (again in Crete), dating back to the 15th century BC. So we must consider this musical instrument as an example of mutual influence between Greek culture (including the Aegean and Minoan civilizations) and the Near East. The *nablas*, *sambykē* and lute represent a passive assimilation, while the *salpinx*, horn and *tympanon* fit the process of selection, since they were probably invented in other countries and later introduced into Greece, where they were played only within a specific context or with a particular function. Finally, harps and the lyre called *barbitos* fully represent the process of devaluation, especially in the 5th century after the Second Persian War, just like some idiophones (*seistron*, *krotala*, *kymbalon*) and the *syrinx*.

The second part of the book consists of four chapters focused on the opinion the ancient Greeks had of Phrygian, Lydian and Thracian music and some mythical musicians. In chapter 1 De Simone investigates the relationship between Phrygian music and the orgiastic cults in honour of Kybele or Dionysus and points out that Crete and the Minoan civilization had played a role in the origin of the metroac/dionysiac music before Phrygian culture developed. In chapter 2 this Anatolian region is the focus for the shift from ritual music to musical hedonism and virtuosity thanks to skillful mythical *aulētai* like Olympus and Marsyas. Lydia (ch. 3) does not have its own musical mythology, but Lydian music is usually associated with harps and *barbitoi* as well as *auloi*, often played at the same time in a kind of concert, and the Greeks looked on it as the expression of a non-Greek culture. Once more mythos had a part in the musical tradition of Thracia (ch. 4), as in the stories about the musicians Orpheus and Thamyris. The relationship between that northern region and Greece was changing across the centuries, as attested by the different representations of Orpheus in the archaic and classical age, fluctuating between wisdom and inadequacy. He originally had powers like a wizard, that were shared also by Thamyris: a feature of Thracian music. But Plato approves of Orpheus' shameful murder by women as the right punishment for his cowardice: he wanted to reach his dead wife but he did not have the courage to die, so he unsuccessfully tried to fascinate the underworld gods by his music.

De Simone presented some of this material at the 7th Annual Meeting of Moisa (Urbino, 5th-6th September 2014) and her paper was published in the

Proceedings (De Simone 2016). This volume (Bravi, Lomiento, Meriani and Pace 2016) was printed in the same year as De Simone's book and is not mentioned in her bibliography, but it includes many other papers, e.g. those by A. Kárpáti, N. Baltieri, A. Fongoni, Th. E. Ulieriu-Rostás, which mostly support or integrate her argument.

The so-called New Music was a turning point in the development of ancient Greek music, including innovations that affected the instruments, the tunes, the scales and musical taste, so we would expect it to receive considerable attention in this book. At first glance it is only mentioned in the title of the third paragraph of the chapter on Lydian music (part 2, ch. 3.3), but De Simone has in fact paid more attention to that relevant moment in several passages of her text (e.g. in the first part, dealing with harps and the *barbitos*, and in the conclusion, and in the second part, occasionally in the chapters on the Phrygian and Thracian music). The material on the New Music should have all been put together in one chapter, as it would be useful to focus on the anthropological processes that such a peculiar context implied, or a general index would be necessary in addition to the index of modern names (225-8) and the index of the Greek and Latin sources (229-35).

All in all, this book has two important strengths: the focus on the Aegean and Minoan civilizations in the relationship between the musical cultures of the Near East and Greece, and the male and female distinction in the processes of redefinition and devaluation of musical instruments and traditions. Tombs in Hagia Triada show the presence of the *elymos* in Crete earlier than in Phrygian culture and also testify to the existence of lyres with a half-moon box (the Cretan lyres) in the Aegean before Greek culture developed, so De Simone suggests that Pre-Hellenic culture had an important role in the process of definition of the lyres with a round box. As for the relationship between music and gender, we may assume that in the archaic age the *barbitos* and harps were well-considered, since they were played by both male and female musicians, while in the late classical age they mostly became associated with maenads or courtesans, so it is evident that the Greeks had a worse opinion of those instruments. Or, again, Orpheus was the hero who defeated the Sirens but also the one who was not able to bring Eurydice back to life because of his inadequacy: the focus on the first mythical episode is usually connected to a good opinion of Orpheus and of Thracian music, while the authors, like Plato, who pay more attention to the second event are discrediting that musical tradition. De Simone has also emphasized the similarities between the two Thracian musicians, Orpheus and Thamyras, in the difficult relationship with the female, before they both became a symbol of the traditional Greek music playing a stringed instrument, a *kithara*, like Apollo.

Approaching this matter from an anthropological point of view, De Simone has written an interesting and original contribution to the history of ancient Greek music.

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Bravi, L., Lomiento, L., Meriani, A., Pace, G. (eds), (2016) *Tra lyra e aulos. Tradizioni musicali e generi poetici*. Pisa/Roma: Fabrizio Serra (« Quaderni della Rivista di Cultura Classica e Medievale » 14). 406 pp., ISBN 978-88-6227-825-6.

This elegantly printed volume contains 21 articles, originally presented at the 7th Annual Meeting of MOISA—International Society for the Study of Greek and Roman Music and Its Cultural Heritage. As the Editors explain in their foreword (9), the theme has been chosen in order to promote further consideration of the features of musical (aulodic, citharodic, lyric) forms and their relationship with the poetic genres of Greek and Roman culture. This is no doubt the main theme of the volume. But it has even more to offer its readers: some papers are also devoted to construction techniques of the lyre, Greek dance, philosophical interpretations of *mousikē*, ancient scholarship on metre and music, and, finally, ancient iconography of musical instruments or performances. This shows once more how multifaceted a phenomenon ancient Greek *mousikē* was and how much it deserves to be treated from different—and complementary—perspectives.

The articles are arranged into 6 thematic sections. The first and largest one, *Performance musicale e generi poetici* (15-154), is opened by A. Barker's paper on Plut. *Quaest. conv.* 704c4-705b6 (15-28), which was not delivered at the conference, but represents a sort of "footnote" (15 n. 1) to the paper presented on that occasion. Barker focuses on the parallels between the portraits of the wealthy Callistratus and a virtuoso musician (an *aulētēs*, but not an *aulōdos*, as the Greek text reads: see 24)¹ performing at a symposium hosted in Callistratus' house, and convincingly shows how both are portrayed as sophists, in the negative (Platonic) sense of people who exert their influence by non-rational means and corrupt their listeners. Noteworthy is the easy and convincing textual proposal made by Barker at 704c8 (comma removed after ἐν ᾧ ὄνι and inserted after χοροῦ), which better accounts for the reference to the chorus within the context (see 25). L. Bettarini (29-40) deals with bucolic poetry, showing that Theocritus was quite attentive to bucolic *Realien* on a musical level, while post-Theocritean poets put in the hands of their shepherds instruments which traditionally did not pertain to them, such as the double pipe *aulos* and stringed instruments. (B. is uncertain, however, about the nature of the *pēktis* quoted by [Theocr.] *Ep.* 5 Gall.: see 35-8.) A special case is the *plagiaulos*, which does not appear in Theocritus' *Idylls*, but is legitimated

1 However, as B. points out (24), "we cannot tell whether the misleading designation at 704c5 is a slip by a copyist or by Plutarch himself". In light of this second possibility, therefore, the Greek text can not be changed, even though the designation is no doubt wrong.

by Bion (fr. 10,6-8 Gall.) as a bucolic instrument by crediting its invention to Pan—a legitimization which was to be successful in later Greek literature. C. Calame (41-55), moving from B. Gentili's pragmatic approach to ancient Greek melic poetry, considers the role of performance in shaping poetic genres. After an analysis of the different treatments of Helen of Troy in the fragments of Alcman, Stesichorus, Alcaeus and Sappho, he concludes with an interpretative proposal: rethinking pre-classical *melopoïia* as a 'song and performance culture network' (54)—with several possibilities of intertwining formal (metre, language, etc.) and narrative forms in order to meet the specific conditions of enunciation required by a specific occasion of performance—more than as a dialectic between 'Panhellenic' and 'epichoric'. M. De Simone (56-71) devotes her attention to the musical instruments used by archaic orientalizing poets (Sappho, Alcaeus, Anacreon) and their alternating fate afterwards, especially in classical Athens. There they underwent a gradual process of marginalization, which was challenged by the so-called 'New Musicians', who reactivated the musical paradigm associated with those instruments—a paradigm based on the plurality of notes (*polychordia*) and melodic complexity (*poikilia*). As D.S. observes (71), this clearly shows that the dialectic between tradition and innovation intersects another, that between dominant and divergent paradigms. S. Ferrando (72-84) makes an attempt to contextualize the high number of lyres and *auloi* dating to the 6th century BC found in the ancient Locrian necropolis of Contrada Lucifero. She associates the *auloi* with *threnoi* and *epikēdeia* and the lyres with sympotic *skolia*, positing a symbolic reference—respectively—to the funeral rite and to the joyful moments of human life, probably entailing the wish to take part in similar banquets in the afterlife. However, it should be remembered that stringed instruments were sometimes connected with the funeral rite in Greek culture (see the chapter by A. Provenza and Cannatà Fera 1990, 39-43, with further bibliography): this possibility too could be explored to account for the numerous lyres. A. Provenza's paper (103-18)²—which I anticipate here for the sake of convenience—highlights two different traditions in Greek culture pertaining to the role of music in connection with death. In the most widespread, represented by Greek tragedy (especially Eur. *Hel.* 167-78) and funerary iconography of the archaic and classical periods, music constitutes the last connection with life for the dead, and a way of soothing the grief of his relatives. Symbols of such a tradition are the Sirens, who accompany the soul of the dead to the Underworld by means of their song and music. A rather different role is assigned to the music of the lyre/kithara in the Orphic tradition: it assists the descent of the initiates' souls to the Underworld,

2 Notice that the order of the papers within each thematic section is alphabetical.

introducing them into a new life. E. Pöhlmann's contribution (85-102) is devoted to an intriguing musical document, the *Hymn to the Holy Trinity* transmitted by *P.Oxy.* 1786: after a lucid survey of the studies in the last seventy years—from E. Wellesz (1945) to C. Cosgrove's comprehensive analysis (2001)—, Pöhlmann focuses on the astrophic form of the composition and its metre (anapaestic monometers)³ to confirm that it is deeply rooted in “the metrical and musical tradition of the Greek pagan and Christian poetry of Imperial times” (97) and to show that it is best regarded as a citharodic monody or *nomos*—in the same way as the hymns by Mesomedes and Synesius—perhaps with heterophonic accompaniment. In this regard, P. observes (100), the *Hymn to the Holy Trinity* sensibly differs from Latin hymnody, which has been attentively considered previously by P. in this journal (2017). K. Wyslucha (119-37) analyzes some passages from Vergil, Ovid, Horace and Propertius containing references to their actual or fictional mode of performance and suggests that “while *legere* (and its variants, e.g. *scribere* and *recitare*) usually pertains to the contemporary performative practice, *canere* (*cantare*) abides in the ‘fictional’ layer of poetic imagery, embodying the appropriate, constant generic definition in contrast to the variable fashions of poetic recitals” (136). In other words, sung delivery is nothing other than a fictional ‘generic marker’, which does not reflect any real performance—a perspective which could have been partially adjusted by taking into account the results of Rossi's study on Horace's *Carmen saeculare*,⁴ where literary testimonies (“hardly a reliable witness”, 120) are integrated with metrical analysis (with particular attention to the treatment of caesuras). An interesting point made by W. is that in the Augustan age reading, *qua* legitimate mode of performance of elegy and eclogue, becomes a generic marker. It could be added, however, that already in the Hellenistic age reading and writing appear as literary themes, particularly in poets' self-presentation (see e.g. Call. *Aet. fr.* 1,21 Massimilla = Harder, Posidipp. *SH* 705.5f.—both elegiac).⁵ A. Yerucham (138-54) explores the interdependency between religious and musical practices in ancient Greece through the analysis of Euripides' *Bacchae*, read as a «mythical narrative of cult foundation» (141). Y. stresses that musical and dancing practices are an integral part of a cultic whole and introduces the notion of ‘cultic soundscape’ to refer to “the complex codes of accepted music

3 Notice, however, that in one instance (vv. 11f.) two monometers are paired by verbal synapheia: this suggests the possibility that some other monometers could have been joined together to form a longer verse. Of course, this does not obliterate the fact that the fundamental rhythmical unit of the hymn is the anapaestic monometer.

4 The reference is to Rossi 1998.

5 On this issue see e.g. Bing 1988 (rev. ed. 2008) and—with particular reference to pastoral poetry—Breed 2006.

making, acoustic appreciation, and musical embodiment” in a given local cult (139). The case of Dionysiac soundscape in the *Bacchae* is well chosen, since music is a prominent aspect of the god’s invasion of Thebes. Of course, this situation can not be generalized and it might be useful to introduce different typologies of soundscape based on the different involvement of the worshippers in musical practices (e.g. ecstatic vs non-ecstatic rites). It is also worth distinguishing between the enthusiastic experience of Dionysiac music from the musical purifications of entire city states by citharodes such as Thaletas (cited on 149) or Terpander, since the musical medium acts in considerably different ways: in the first case, the *aulos* and percussion instruments enchant and ‘invade’ the human soul (cf. e.g. *Ba.* 233-8), while in the second the stringed instrument produces a well ordered *kosmos* in the soul of the citizens and in the whole city.

The second section (*Lyra*), is opened by S. Hagel (157-66), who offers a convincing reconstruction of the bone pieces found in grave 754 (dated from before 450 BC) in the necropolis of Contrada Lucifero, Locri: they seem to belong to the tortoiseshell lyre whose remains have been recovered in the grave, more particularly to the yoke. Most probably, as H. proposes, some of them were pins used to tune the strings: their shape, characterized by a central recession, suggests that they were “meant to be bound immediately to the yoke by means of the string”, “wound around the pin in crosswise fashion” (161 and 164). The following paper (167-98), by A. Kárpáti, is centred on Thamyras’ song contest with the Muses, particularly on its representation on Polion’s krater (ca. 420 BC). K. makes two proposals: 1) The little statues of the Muses depicted on the vase—as well as on other vases dating from 460-410 BC⁶—are voodoo-like dolls used by Thamyras as “a substitute for ‘inspiration by the Muses’ or, in addition to this [...], employed to paralyse the opponent in the contest or to wear down their strength by counterforce” (185); such a resort to magic would stem from Sophocles’ *Thamyras*, even though there are no clear hints of magical rites in the few surviving fragments. 2) The depiction of Thamyras as a fifth-century Greek kitharode could reflect the “contemporary rehabilitation of a musician-poet shaped into a *post hoc* mythical forerunner of norms” (190), and could “also be related to a piece of the New Dithyramb” concerning this myth and proposing an “avant-guard, anti-version” of the story (193 and 195). Both these interesting suggestions develop previous interpretative proposals, which are however not generally accepted by scholars, given the limited and ambiguous state of the available evidence: Kárpáti proceeds therefore *per incerta ad*

6 It is a pity that the reproductions of these vase paintings, referred to by cross-references, are missing.

incertiora, as he himself recognizes (182, 185, 189), and his conclusions can not but be speculative. **C. Romero Mayorga** (199-206) examines a Roman sculpture representing Mercury with a lyre (Mérida, Museo Nacional de Arte Romano, inv. n. CE00089) from 155 AD. and clearly related to the Mithraic cult, since the inscription on the musical instrument mentions the god and the local highest authority of the cultic community. The author's contention is that the prominence given to the lyre could reflect the important—though “traditionally ignored” (206)—role played by music in the initiation process, which is also suggested by Celsus' reference to the theory of the harmony of the spheres in connection with Mithraic initiates (cf. Orig. *Cels.* 6.21f.).

The section on the *aulos* is made up of three articles. The first (209-32), by **N. Baltieri**, is devoted to Melanippides's *Marsyas* (PMG 758) and Telestes's *Argo* (PMG 805a-c): she argues that both these poems could have been performed not only to a virtuosic and expressive music, but also with the accompaniment of the mimetic movements of solo dancers—something which is supported by verbal clues in PMG 805a (see esp. v. 4), but is less certain in PMG 758. In this second case—B. proposes (226f.)—mimetic dance was perhaps performed by the *aulos*-player himself, as is suggested by the parallel case of Timotheus's *Scylla* (cf. Arist. *Po.* 1416b30, quoted on 227 n. 3). On general grounds, the conclusive contention that New Music could have also entailed a new, mimetic dance proves to be attractive. **A. Fongoni** (233-45) analyses the same poetic fragments (PMG 758 and 805) in order to reassess the traditional view—based on Ath. 14.616e617f—that Melanippides and Telestes expressed, through different treatments of the Marsyas myth, their own views on the musical accompaniment to the dithyramb⁷: according to her, the first composer was favourable to *kithara* music, since he introduced this instrument in his dithyrambs to accompany virtuosic preludes (or *anabolai*, which are attested by Arist. *Rh.* 1409b24-30) and other solos (whose presence, however, largely rests on a hypothesis of J. Boardman),⁸ while Telestes was more inclined to the traditional preeminence of choral song to the accompaniment of the wind instrument. **S. Perrot** (246-63) focuses on the anonymous aulodic song preserved by *P.Oxy.* 1795 (first century AD), especially on its fourth extant strophe, where four instruments are quoted (an *aulos*, a reed pipe, a lyre and some tambourines). The instruments and the references to Phrygian and Lydian tunes lead

7 A different view has been expressed by P. Leven 2010 and 2014, 105-12.

8 The reference is to Boardman 1956. Notice, however, that the vase paintings interpreted by the scholar as a ‘visual translation’ of Melanippides's *Marsyas* have been differently explained by A. Heinemann (2013, 297 and n. 62). See also the paper by T.E. Ulieriu-Rostás in the volume here discussed.

him to suggest that “the singing poet might be a mythological figure, that is Olympos, or at least a poet who is comparing himself to Olympos” (253)—even though the lyre is not accounted for in this way and it should be explained as “a metonymy for the musical genre, because this song belongs to lyric poetry” (262)—and “a devote of Cybele” (261).

Under the title *Tradizioni musicali* there are, again, three contributions. In the first, **T. Lynch** (267-84) reconsiders Plato's preference for Phrygian and Dorian *harmoniai* from a technical point of view, a perspective which allows for a satisfactory account of this selection: the structures of the two modes are the only ones compatible with the standard framework of a fifth-century lyre *harmonia*, while the rejected modes seem to be more suitable to *aulos* music. This is coherent with Plato's choice to abandon the *aulos* in favour of stringed instruments. **J. Silva Barris** (285-96) discusses another much debated passage of Greek literature, *Il.* 18.570, and convincingly shows that the current interpretation of the word *linon* (= Linos-song) is unsatisfying for several reasons, while the previous one (*l* = lyre string) deserves to be reconsidered: it better fits the context and is supported by ‘Homeric’ diction, especially by the occurrence of the same phrase in *Od.* 21.411 with reference to the resounding string (*chordē*) of Odysseus' bow. The main objection to this interpretation is that *linon* «is not used elsewhere in poetical texts meaning ‘string of a musical instrument’» (288).⁹ However, I would suggest that the need for an ‘iambic’ synonym of the ‘spondiac’ term *chordē* used in the *Odyssey* could account for the use of *linon*. **A. Tessier** (297-303) offers a brief and lucid survey of the main features of the anonymous treatise on Greek metres transmitted by *Vat. gr.* 896 (written towards the middle of the 14th century, or slightly later), followed by a *specimen* of a planned new critical edition—which has appeared in the meanwhile (Tessier 2017).

The next section (*Tra lyra e aulos: letture filosofiche*) hosts only one paper by **S.F. Moro Tornese** (307-24). The author deals with the opposition and complementarity of lyre and *aulos* in the Neoplatonic allegorical interpretation of myth, showing that *aulos* music is not constantly considered in negative terms: following Plato, Proclus thinks that it is suitable for cathartic, especially Dionysiac, rites.

9 As for the passages testifying to this meaning, quoted on 288f., it is worth noting that the scholia and the lexicographical entries are not independent testimonies (e.g. Phot. λ 326 Th. and Eust. *Il.* 421.28 both depend upon Ael. Dion. λ 17 Erbse, while *Suda* σ 570 A. depends upon *schol.* A *Il.* 570b Erbse and gl. Hdt. 2.79). In all probability, many of these passages ultimately go back to the Alexandrian age, with a notable exception: Heracl. Pont. fr. 160 Wehrli.

The last two articles concern vase paintings. T.E. Uliერიუ-Rostás (327-54) thoroughly reexamines representations of satyrs and Dionysus with lyres and *barbitoi* dating back to the late 5th and the early 4th-century. The author isolates a coherent visual trend, starting with the Dinos Painter, which seems to disregard “conventional perceptions of music appropriateness and ethos” in contemporary Athens (353). However, no clear polemic intentions emerge from these paintings, which “project representations of archetypal musical performances outside the framework of the New Music polemic altogether” (354). A. Goulaki-Voutyra (355-90) surveys many vase paintings of the Classical period providing some details of playing technique in connection with the accompaniment of the human voice. The premise of this work is that “poses and gestures of musicians, conventional or not, reflect, however, aspects from a real practice which we have to decode, building very carefully on the painter’s effort to present a technical detail” (357). The following discussion proves to be sensible and cautious, and very useful. There is only one place where, at least in my opinion, the author is perhaps too sceptical: when she dismisses the possibility of simultaneous playing of stringed and wind instruments, which is suggested by some literary testimonies.¹⁰ Though probably much less widespread than the alternate playing of these instruments, such a practice seems not to have been unknown in the Classical age (see West 1992, 346; see also 336). The book is completed by an extensive index of quoted passages (391-406).

All in all, this volume offers useful surveys of both literary and iconographic sources and many thoughtful insights on different aspects of ancient Greek *mousikē*, and will prove to be useful to all those who are seriously interested in this subject.

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10 E.g. the *kitharistērioi auloi* mentioned by Aristox. fr. 101 Wehrli.

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